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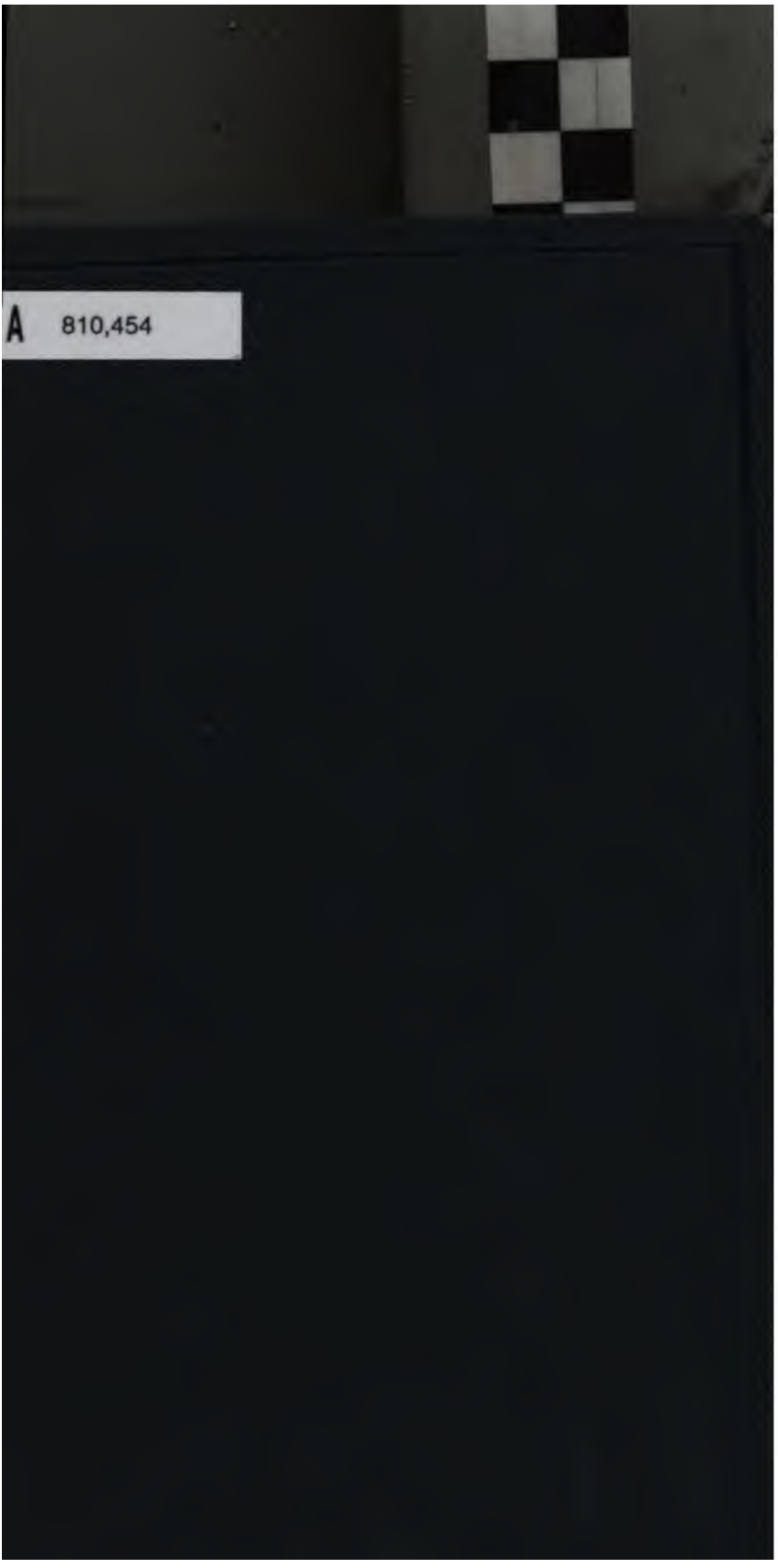
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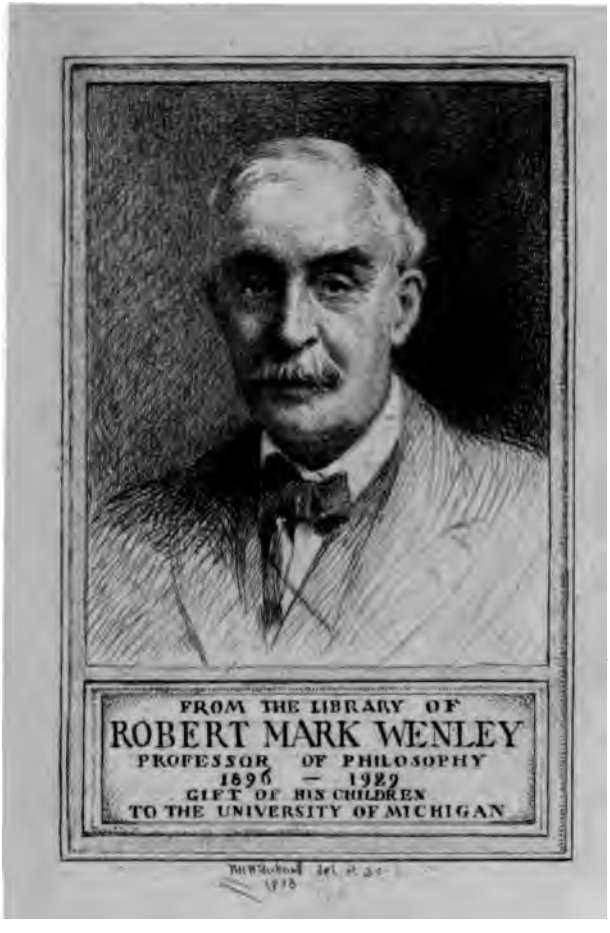
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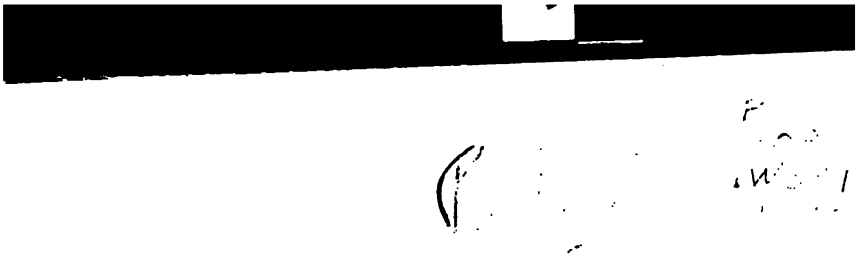
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AN

OUTLINE OF PHILOSOPHY

WITH

NOTES HISTORICAL AND CRITICAL

BY

JOHN WATSON, LL.D.

PROFESSOR OF MORAL PHILOSOPHY IN QUEEN'S UNIVERSITY, KINGSTON, CANADA; AUTHOR OF "KANT AND HIS ENGLISH CRITICS," ETC.

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PREFACE TO THE SECOND EDITION.

THE call for a second edition of this little work—which now bears the more appropriate title, AN OUTLINE OF PHILOSOPHY—has led me to attempt to make it somewhat more worthy of the favour with which it has been received. Knowing well how incomplete is the treatment of the various problems with which it deals, my first impulse was to re-write and extend the whole; but I soon found that to do so would be to construct a complete system of philosophy, a task for which I do not yet feel competent. Besides, a work of that character would not fulfil the function of a manual, which cannot do more than awaken an interest in philosophical problems, and indicate the lines on which in the opinion of the writer they may be solved. I have therefore, with some reluctance, retained the original OUTLINE, contenting myself with making a few changes, especially in Chapters VI. and X., which, as I hope, may help to make the meaning clearer, especially if they are read in connexion with the corresponding Notes VIII. and XII. The NOTES HISTORICAL AND CRITICAL of the present edition are intended to give a fuller view of topics discussed in the body of the work, and to show their historical affiliation. They may also serve to indicate the difficulty and complexity of some of the problems which the original plan of the book

compelled me to treat in a somewhat summary way. These Notes, on the whole, follow in logical as well as historical sequence, and therefore admit of being read by themselves, though they should also be considered in relation to the main argument. In preparing them, my difficulty has been to decide what to exclude. At first I thought of making frequent references to the masters in philosophy, as well as to contemporary writers; but it became evident as I proceeded that this method would increase the size of the book so much that a separate volume would be required, and this I was anxious to avoid. I have therefore introduced only such Notes as seemed best fitted to throw additional light upon the principal questions discussed in the text, avoiding the discussion of points in which I am compelled to differ from the views advocated in such important works as Mr. Bradley's *Appearance and Reality*, Mr. M'Taggart's *Studies in the Hegelian Dialectic*, and Mr. Hobhouse's *Theory of Knowledge*.[1]

The following extracts from the former Preface will sufficiently explain the general scope of the book.

"The philosophical creed which commends itself to my mind is what in the text I have called Speculative Idealism, by which I mean the doctrine that we are capable of knowing Reality as it actually is, and that Reality when so known is absolutely rational. Such a doctrine seems to many to be presumptuous, contrary to the sober spirit of inductive inquiry, and based on an untenable theory of knowledge and

[1] The views discussed in the Notes are (in historical order) those of Plato (i. A), Aristotle (i. B, ii.), Descartes (ix. A), Locke (iv. A), Berkeley (iv. B), Hume (iv. C), Kant (ix. B, xii.), Hegel (vi. B), Lotze (x.), J. S. Mill (v.); and, of recent or contemporary writers, Green (xii.), Mr. Bradley (xi.), and Mr. Alfred Sidgwick (iii.).

conduct. My aim has been to show that these objections rest upon a misunderstanding of the idealistic position, at least as held by such writers as the late Professor T. H. Green and the present Master of Balliol. The general proof of Idealism must consist in showing that, while the determination of Reality by such categories as coëxistence, succession, and causality, is capable of vindication so long as it is not regarded as ultimate, it becomes false when affirmed to be final, and that we are compelled at last to characterize existence as purposive and rational. There are various ways of enforcing this view. The method which I have followed here is to attempt to show that the ideas which lie at the basis of Mathematics, Physics, Biology, Psychology and Ethics, Religion and Art, are related to each other as developing forms or phases of one idea—the idea of self-conscious Reason.

"No apology seems needed for the publication at the present time of an Outline of Philosophy. There is no lack of Introductions to Psychology and Ethics, but, so far as I know, there is not in English any book which seeks to give in moderate compass a statement of Philosophy as a whole. I am well aware that there is danger in generalities, but there seems to be just now an even greater danger that Philosophy, in the large sense in which it was understood by Plato and Aristotle, should be lost in artificial divisions and in a mass of empirical detail. There is no doubt a vast body of material—biological, psychological, and historical—which will have to be reduced to system some day; but in the meantime there is a certain justification in a work like this, which tries to fix the main outlines of a complete system of philosophy.

"A teacher naturally prefers his own way of putting things, even when he agrees in general with another, but perhaps the following pages, which contain the substance of lectures delivered by the author to his own students, may be of some use to students and even to teachers in other Universities. Should any of my fellow-teachers think of using this OUTLINE in the class-room, I may mention that in my own practice lecturing is only a part, and perhaps the least important part of the work actually done. So far as practicable, it is my habit to insist upon a first-hand study by the class of the authors I criticize. Every year's experience confirms me in the conviction which I ventured to express some years ago in the Preface to my *Selections from Kant*, that lectures upon authors who have not been read have very poor educational results.

"In preparing this OUTLINE I have been most indebted to Green's *Prolegomena to Ethics* and the criticism of Mill contained in his *Philosophical Works*; to Mr Caird's *Comte* and *Critical Account of the Philosophy of Kant*; and, in a lesser degree, to the late Professor Stanley Jevons' articles on Mill's *Logic* in the *Contemporary Review*."

The Index of Topics and Index of Authors at the end of the volume will, I hope, be useful. The latter will enable the reader, if he so desires, to consider the views of a particular thinker as a whole, so far as I have had occasion to deal with them.

For a fuller statement of the philosophy of Aristotle than that contained in Notes I., II., and VI., I may refer to four articles of mine, the first of which appeared in the *Philosophical Review* for Jan., 1898, Vol. VII., No. I. I have to thank the editors of that *Review* for permission

to reprint what is here called Note II. My thanks are also due to Dr. Vaihinger for his courtesy in allowing me to reproduce as Note IX. what originally appeared as an article on *The Cartesian Cogito ergo Sum and Kant's Criticism of Rational Psychology* in the *Kantstudien*.

JOHN WATSON.

QUEEN'S UNIVERSITY,
KINGSTON, CANADA,
23rd August, 1898.



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AN OUTLINE OF PHILOSOPHY.

CHAPTER I.

THE PROBLEM OF PHILOSOPHY.

"THE feeling of wonder," says Plato in his dialogue the *Theaetetus*,[1] "is the genuine mark of the philosopher; for philosophy has its origin in wonder; and he was no bad genealogist who said that Iris is the child of Wonder." Those who are destitute of this feeling he calls the "uninitiated," who "will not admit that there is any reality but that which they can take hold of with their hands." Philosophy, in other words, at first exists as an immediate feeling or conviction, that things in their real or ultimate nature are not what at first they seem to be. It looks beyond the shows of things to a reality that is felt to be implied, although it is not yet grasped by the mind as a definite object, the nature of which can be expressed in precise and definite language. We can say, negatively, that reality, as it is behind the veil of sense, is not that which we see with our eyes and grasp with our hands; but at first we cannot apply to it any definite

[1] *Theaetetus*, 155 C D.

predicates. Wonder may therefore be said to be a self-contradictory feeling. It denies that what we know is real, and yet it cannot tell us what reality is. We are conscious of our ignorance, and yet we claim to know that we have no knowledge. The man of hard common-sense, the "uninitiated" as Plato would call him, can therefore make out a very good case for his rejection of philosophy as a useless quest for what can never be known. Like Mephistopheles in Goethe's *Faust*, he prides himself on taking things as they are, and refusing to follow the lead of mere ideas. Plato, on the other hand, finds in the vision of the ideal the true reality. Those who are content with the first or unreflective view of things he likens to men confined within a dark underground cave, with a narrow opening towards the light, who see only the shadows of things thrown on the wall as they are carried past the mouth of the cave. In this conviction of the reality of the invisible and intangible, Plato is at one with those who believe that in art and religion there is revealed something truer than all that we can directly perceive with our senses. Poetry and religion, as well as philosophy, claim that there is a contradiction between what *seems* and what *is*, and that true reality can be revealed only to the higher vision. He who is satisfied with the first or unreflective view of things need never hope to know reality as it truly is. There is a divine unrest which compels us to search for the hidden truth of things. As Aristotle says, it is in the effort to be rid of ignorance that men have been led to construct philosophies. The object of philosophy is therefore to search for the first principles of things; to discover, if that be possible, what *is* as distinguished from what *seems*

to be. Hence Aristotle well says that philosophy has to do with existence as it really is.

It must be observed, however, that philosophy cannot be defined as the *science* of reality. For it may be that the ultimate nature of reality cannot be discovered by man. As a matter of fact there is at the present time an influential class of thinkers who hold that man is so constituted that he never can have a knowledge of ultimate reality. Human knowledge, they maintain, never reaches beyond phenomena or appearances. Much may be learned about the nature of phenomena, but nothing about the reality which lies behind phenomena. Carry your investigation to the extreme limits of the phenomenal world; lay bare the laws which govern the minutest and the most distant object accessible to our observation, even when it is aided by the most delicate instruments, and you are as far as ever from the ultimate nature of things. The progress of human knowledge does not enable us to break through the charmed circle within which we are compelled to move, but only serves to bring into bolder relief the great unknowable reality against which the bounded circumference of the known world becomes visible. I hope to show that this doctrine of the unknowability of ultimate reality cannot be accepted, but manifestly we cannot, in the face of such a denial, assume that reality as it truly is can be known by man. If it can be established that philosophy leads to the knowledge of ultimate reality, we may then define it as the science of first principles; but, in the meantime, we must be content to say, that it is the *search* for first principles.

To understand all that is implied in this definition we

must make clear to ourselves the distinction between philosophy and other branches of human knowledge, and especially between philosophy and science.

None of the sciences seems to rest on so firm a foundation as the science of mathematics. That $2+2=4$; that the straight line between two points is the shortest that can be drawn; that the interior angles of a triangle are equal to two right angles: such propositions as these are usually assumed to be absolutely true and to admit of no possible exception. The mathematician is therefore accustomed to assume that the propositions of his science are demonstrably true, and that no conceivable advance of knowledge can ever upset them. He does not speak with stammering tongue, as Aristotle says of the early Greek philosophers, but announces his results with perfect assurance of their truth. And yet there is a question which mathematics has not raised, and without resolving which the absolute truth of its conclusions cannot be established. It is assumed by the mathematician that the objects which we number and measure could not be of an entirely different nature from what they are for us. When it is said that a straight line is the shortest distance between two points, it is taken for granted that every possible space must be, like ours, of three dimensions and absolutely devoid of curvature. It is further assumed that what is affirmed of lines, triangles, and circles in the abstract is equally true of real lines, triangles, and circles. Now both of these propositions have been denied. It is maintained by such eminent mathematicians as Riemann, Helmholtz, Clifford, and Sylvester, that our space of three dimensions is only one of an infinite number of possible spaces, and that,

were our experience wider, we should find that our Euclidian geometry is of very limited and partial application. It is further maintained by so eminent a thinker as John Stuart Mill, that the propositions of arithmetic and geometry are not absolutely true even in their application to the sensible reality which we are capable of knowing. The only source of our knowledge, it is held, is experience. No real knowledge can be obtained from the mere exercise of our own minds. To get at reality at all we must go to experience. But experience can never assure us that what has presented itself to us in a certain way might not possibly appear in an entirely different form. Hence, mathematics, if it is a science at all, must rest upon the facts of experience. Let us see the conclusion to which this doctrine of Mill naturally leads.

In the first place, Mill maintains that the supposed exactness and necessity of mathematics is a delusion. (1) Mathematics is not an exact science. What is the foundation of the science of geometry? Plainly the so-called definitions. But upon what do these definitions themselves rest? They cannot be self-evident, because all that a definition can tell us is the meaning attached to certain terms. Definitions are purely verbal, and prove nothing in regard to the reality of that which is defined. I may define a centaur as a being half man and half horse, but it does not follow that a centaur exists *in rerum natura*. Similarly, I may define a circle as a figure the radii of which are all equal, but it does not follow that a real circle corresponding to my definition actually exists. To determine whether the definitions of geometry are true or false we must have recourse to experience. Now, when

we go to experience, we find that there are no real things corresponding to our definitions. Where in nature shall we find a point without magnitude, a line that is perfectly straight and without breadth, a circle with all its radii exactly equal, a square with all its angles perfectly right? An actual sensible point is a surface, a real line is the edge of a sensible object, and such a line is never perfectly straight; the surface of a thing is always more or less uneven. There is no doubt that geometry deals with real things, but the discrepancy between its definitions and sensible realities shows that it is not dealing with those things as they truly are, but only with a partial aspect of them. We are therefore compelled to conclude that geometry is not an exact science. (2) Nor is geometry a necessary science. (*a*) Like other sciences it rests upon induction, or, in other words, it states in a general form what experience has shown us to hold good in a number of particular instances. No accumulation of such instances can warrant us in saying that things *must* be as our experience has shown them to be. It is true that geometry draws its conclusions from figures that are not directly perceived, but are only represented in imagination. But imagination can never represent what has not been presented beforehand in perception. When I have once perceived two straight lines meet and then diverge, I can imagine them diverging as far as I please, but I can never imagine them as again meeting. It is this peculiarity of our imaginative faculty which explains the apparent necessity of geometrical propositions. We are unable to imagine diverging lines as meeting, however far we may prolong them, because our whole experience contradicts the supposition. We have at one time seen

two straight lines diverging from a point, and at another time we have seen two straight lines converging, but we have never seen two straight lines at once diverging and converging. The supposition is excluded from the nature of our experience. But it must be carefully observed, that experience can never warrant a conclusion wider than itself. There is nothing impossible in the supposition that two straight lines should enclose a space. The supposition is contrary to our experience, but it cannot be shown to be contradictory of the nature of things. There is nothing contradictory in the notion that $2 + 3 = 6$. Were our experience wider we might meet with objects of a different nature from those with which we have come in contact. (*b*) Mill therefore goes on to explain the apparent necessity of mathematical propositions on the principle of inseparable association. All that is meant by the term "inseparable association" is, that two ideas which have always gone together in our experience become so closely united that, having no contrary experience, we cannot conceive of them as separated. Such ideas are those which are combined in a mathematical proposition. Their apparent necessity is merely the subjective necessity of uniform association. Ideas that have never been experienced apart we naturally suppose to be inseparable in nature as they are in our experience. An instance of inseparable association we have in the proposition that two straight lines cannot be thought of as enclosing a space. We cannot say that two straight lines cannot enclose a space, but only that we cannot think of them as enclosing a space. The only reason we have for our affirmation is that we have had no experience of straight lines enclosing a space, which is a very different

thing from saying that such an experience is impossible.

The general conclusion, then, is that mathematics is not an exact or necessary science, but merely expresses what we have found to hold good within our limited experience, its apparent necessity being due to the natural confusion between a necessity in the nature of things and the subjective necessity of inseparable association.

An examination of Mill's doctrine of mathematics cannot be profitably entered upon at present. In the meantime we may learn from it something about the relations of philosophy and science. (1) The first thing to be noted is, that the question which Mill asks is one which the mathematician as such does not think of asking. The mathematician usually assumes that the conclusions which he reaches are absolutely true, and can be applied in the numbering and measuring of any object that can ever come within the range of his experience. His assumption, stated generally, is, that we can have a real knowledge of the number and magnitude of things. It is true that a mathematician may be aware that there is a further problem which he has not investigated, but it is at least convenient, and conduces to clearness, if we say that mathematics assumes the possibility of real knowledge, leaving to philosophy the task of inquiring into the possibility and the conditions of knowledge. The science of mathematics, then, as we may say, puts forward no theory in regard to the nature of knowledge. Whether its propositions apply only within the limited range of objects as they appear to man, or hold good of all possible objects, is for the mere mathematician a matter of indifference. The question, What is know-

ledge? either has never occurred to him, or he sets it aside as irrelevant to his special investigation. He may be said to be in the attitude of the youthful *Theaetetus*, in the dialogue of Plato to which I have already referred, who, when asked by Socrates, What is Knowledge? answers that "Knowledge consists of all the things we can learn from Theodorus, geometry for instance." Mill, on the other hand, and the same thing is true of all philosophers, has become aware that the true meaning of Socrates' question is, What is implied in the act of knowledge? What constitutes knowledge? In seeking to answer this question, Mill is led, like the Greek Protagoras, as represented by Plato, to say that "Knowledge is sensible perception." We may say, then, that mathematics seeks to answer the question, What do we know about the number and magnitude of things? while philosophy tries to answer the question, What is the nature of mathematical knowledge? Let us call the first problem scientific and the second philosophic. It would then seem that science directs its attention to the objects of knowledge, philosophy to the nature of knowledge itself. (2) This seems to give us a clear distinction between science and philosophy. But on closer investigation we find that the absolute opposition of knowledge and the object of knowledge is one that cannot be maintained. If Mill is right, we must distinguish between the objects with which mathematics deals, and those objects which lie beyond the range of possible experience, or rather, those objects which perhaps lie beyond that range. For it is held that a time might come when the whole fabric of our present mathematical knowledge would be completely upset. We cannot tell, on Mill's theory,

what a day or an hour might bring forth. Suddenly our experience might completely change its complexion, and diverging lines might be found to enclose a space, parallel lines might meet, squares might appear round, and straight lines curved. "To conceive a round square," says Mill, "would only be to conceive two different sensations as produced in us simultaneously by the same object; and we should probably be as well able to conceive a round square as a hard square, or a heavy square, if it were not that, in our uniform experience, at the instant when a thing begins to be round it ceases to be square, so that the beginning of the one impression is inseparably associated with the departure or cessation of the other."[1] It is here implied that there is no absolute fixity in the quantitative relations of things. Now this means that there are infinite possibilities of experience such as we cannot even imagine with any definiteness. A world in which all our mathematical conceptions were completely reversed is so different from anything we can figure to ourselves, that we can only say, generally, that it would be totally unlike anything of which we have had experience. The question is therefore forced upon us, whether we can admit even the possibility of such a world. So long as we admit its possibility, it is plain that we cannot claim to have any knowledge of things as they truly are. Now this conclusion is so contrary to what mathematics and other sciences are accustomed to assume, that we simply must inquire into the possibility of knowing existence in its ultimate nature. The nature of knowledge is thus bound up with the nature of existence. If real existence cannot be known, real knowledge is im-

[1] Mill's *Examination of Hamilton*, ch. vi., p. 68.

possible. Philosophy, therefore, must seek to determine the relations of knowledge and existence. If it could be shown that Mill's theory of knowledge is false, there would be some presumption that his tacit denial of the knowability of real existence is also false. But there is no other way of coming to a satisfactory conclusion on the question, than by entering into a thorough investigation of the relations of knowledge and reality. It is vain to say that we cannot help believing in the reality of knowledge. That is true enough, but many things that men have firmly believed have turned out to be mere prejudices. There is no possible way of satisfying doubt but by facing it. To dismiss a problem without inquiry leaves in the mind an uneasy consciousness that the sceptic may after all be right. Philosophy, just because it seeks to determine the ultimate nature of things, can never be satisfied with anything short of truth that may be verified by the unbiased exercise of reason.

Now if we could only show, by an inquiry into the relations of knowledge and existence, that we are capable of knowing reality as it truly is, or, in other words, that in whatever sense mathematics is true of any existence it is true of all possible existence, the sceptical conclusion of Mill would be proved untrue. It cannot be denied that at first sight there seem to be insuperable difficulties in the way of such a proof. To say that man can, so to speak, contemplate existence from the point of view of omniscience seems to be the extreme of presumption. It must be observed, however, that it is not less presumptuous to say that man *cannot* know things as they really are. For how can any one say that we do not know real existence unless he has some knowledge of

what real existence is? Presumptuous or not, philosophy cannot avoid the question: Is the knowledge of real existence possible? Thus the inquiry into the nature of knowledge is necessarily bound up with the inquiry into the nature of existence. (3) We may now see, in some degree, how philosophy is related to the science of mathematics. It is the nature of the human mind to pass from one stage of activity to another. The science of mathematics had its origin in the desire to determine with accuracy the number and magnitude of objects in space and time. In a very gradual way more and more perfect methods of measurement have been discovered, until mathematics has now reached the dimensions of a vast body of closely connected propositions. There is no manner of doubt that all those propositions hang closely together, and that to deny any one of them is to deny them all. The science of mathematics, in other words, is not a collection of detached propositions, but an organized system in which every part is connected with and dependent upon every other part. Now you will observe that Mill does not in any way question the coherence of mathematical propositions among themselves. If a mathematician advances a new proposition, it is open to another mathematician to say that it is untrue, on the ground that it is inconsistent with what has been already established, or that there is some flaw in the reasoning by which it is sought to be proved. But this is quite a different class of objection from that which Mill makes when he denies the accuracy and necessity of mathematics. Mill not only grants the internal coherence and organic unity of the whole body of mathematics, but his argument expressly appeals to its internal

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the reality of mathematics so far as phenomena are concerned, but it raises the question, whether the laws of phenomena are also laws of things as they truly are. Mathematics hands over this latter question to philosophy, and hence by the decision of philosophy its ultimate value must be determined. On the supposition that a single proposition of mathematics holds good of real existence, the whole body of mathematics holds good of it; if a single proposition is true only of apparent existence, the same thing must be said of the science as a whole. We see, then, that the truth of a special science can only mean, prior to the philosophical criticism of its foundation, that it is perfectly coherent within itself. Perfectly coherent it may be, however, while yet it rests upon an assumption that has never been justified. It is this assumption that philosophy has to investigate, not the truth of the individual propositions which rest upon it. If philosophy can only show that what mathematics has assumed as self-evident may be justified before the bar of reason, the whole body of mathematics will then rise to the dignity of demonstrated truth. If philosophy fails to justify that assumption, we shall have to conclude that mathematics is at the most merely an account of the relations which we have found to hold good of objects within our limited experience. Whatever conclusion we may reach, this is evident, that philosophy presents us with a problem which we cannot evade without mental unrest and disquiet.

We have found then, firstly, that mathematics directs its attention to the objects of knowledge, philosophy to the nature of knowledge itself; secondly, that mathematics assumes that those objects are absolutely real, while philo-

sophy inquires into the truth or falsehood of that assumption; and, thirdly, that philosophy admits the internal consistency of mathematics, but refuses to admit without criticism that any of its conclusions are true of things as they are in their ultimate nature. Let us now see whether philosophy bears a similar or a different relation to the other special sciences.

It will be admitted that those sciences assume that no change ever takes place which is not due to some cause. A body, for instance, is found to assume a crystalline form, and the question at once arises as to the cause of the change. As the change never occurs except in the case of the solidification of a substance from a liquid state, we conclude that such solidification is the cause of the crystallization. And even in those instances in which we are unable to assign the cause, we feel quite sure that the event has not occurred without a cause. So much is this the case that, were we to find instances in which crystallization occurs when a substance was not previously in a liquid state, we should not think of saying that the change arose without any cause, but only that we had not yet found out the cause. The assumption, therefore, which lies at the foundation of all scientific discovery is that the changes which occur in nature do not occur at random, but are connected together in fixed ways. Given the cause, and the effect must follow. As we have found, however, that Mill denies what seems to be the even stronger necessity of mathematical truth, it is not surprising that the assumed connection of events has also been denied. According to Hume it is impossible to show that there is any necessary connection in nature. The only warrant we can produce for our belief that events could

not be connected otherwise than as we have found them to be connected, is the fact that in our experience we have always found them to occur in a certain order.

Because heat and flame have presented themselves together in our observation, we naturally come to imagine that the one could not occur without the other. It is true that we have never found flame that was not associated with heat, but that does not entitle us to say that they might not be separated. No number of observations can ever rise to the dignity of a necessary law. There is nothing to show that any two events which have been connected in our experience nine hundred and ninety-nine times, should not on the thousandth time be found to be totally unconnected. The reason why we suppose events to be necessarily connected may be explained by the fact that any two ideas which have frequently occurred together or in close succession are naturally supposed to imply an objective connection of events. It is a law of the human mind to expect the recurrence of that which has frequently occurred. Hence when an impression or idea arises in our minds, we naturally pass to the idea which has been often found associated with it. The connection of ideas, however, does not prove any necessary connection of events. The supposed connection of events is in reality the subjective connection of habit. Thus Hume completely inverts the ordinary conception of causality. He attributes the connection to the observing subject, not to the observed object. No event is really connected with another, but the transition from one idea to another frequently associated with it is so easy and natural that we are irresistibly led to

suppose a real connection where none can be shown to exist.

Now (1) the doubt which Hume casts upon the real connection of events, like the similar doubt of the necessary truth of mathematics, makes it imperative on us to inquire into the nature of knowledge. The ordinary belief, that all changes are due to something in the nature of things, can no longer be assumed without question. If what we have been wont to regard as a law of things should turn out to be a mere fiction of our own minds, we shall be compelled to alter our whole view of the character of the special sciences. So complete a reversal of our common beliefs cannot be allowed to pass without the severest scrutiny. Hume's sceptical doctrine in regard to causality evidently rests upon his peculiar theory of knowledge. Like his follower Mill, and his master Locke, he holds that what we know of nature must come to us in the form of sensible impressions. It may be, however, that this is a false, or, at least, an imperfect account of the origin of knowledge, and that the denial of the real connection of things is incompatible with the nature of knowledge as properly understood. Be this as it may, a searching inquiry into the nature of knowledge is absolutely indispensable. The belief in causal connection, which all the special sciences assume without misgiving, must be either confirmed or rejected. Here again, therefore, we find that, whereas science limits itself to objects, philosophy investigates the nature of knowledge. (2) It lies on the very face of Hume's denial of the real connection of objects and events, that we cannot tell what is the nature of knowledge without determining at the same time the nature of real existence. If Hume is

right, we must suppose that what we call the course of nature is a perfectly arbitrary succession of events. On his view there is no reason why any event might not be followed by any other event, and therefore no reason why at any moment the whole world of objects might not literally

> "dissolve,
> And, like an insubstantial pageant faded,
> Leave not a rack behind."

The rays of the sun might suddenly freeze water instead of vaporizing it, and the breath of the north wind set the world on fire. We have no other guarantee of what will be but a fancy of our own, which rests upon a confusion between the customary and the necessary. Hume's doctrine is therefore at bottom a denial of all law. There is no limit to the variability of nature but the possible combinations of particular events. What we call laws of nature are merely the accidental juxtaposition of events. A theory of knowledge which reduces the apparent connection of events to a "fortuitous concourse" of disconnected particulars is not to be lightly accepted. It compels us to ask whether the world is destitute of internal coherency and system, as Hume would have us believe. Thus the inquiry into the nature of knowledge is once more found to be connected in the closest possible way with the inquiry into the nature of existence as a whole. (3) We may now see that philosophy has to examine the principles assumed by such sciences as physics and chemistry, just as it has to examine into the assumed necessity of mathematical truth. Those sciences, taking for granted the principle that every change must have a cause, go on to ask what

are the particular causes which account for and necessitate the multifarious changes that occur in nature. Philosophy, on the other hand, asks in what sense we can speak of causal connection at all. Thus, while the special sciences are occupied with particular modes of existence, philosophy deals with the relation of these modes to existence as a whole. Should the final result of philosophy be to confirm Hume's view of causality, the assumed unity and systematic connection of nature could only be explained as a disconnected assemblage of objects and events. In any case, it is the task of philosophy to examine into the fundamental principles on which the special sciences are supposed to rest. Philosophy does not, any more than in regard to the propositions of mathematics, deny the inner harmony of the special sciences. It admits that, in whatever sense any one of the propositions which they contain is true, all the rest are true; but it sets itself to inquire whether any of them has more than a relative value. On the result of this inquiry it depends whether we can, in any proper sense, speak of science at all.

We have seen that philosophy bears the same general relation to the other sciences which it bears to mathematics, and we may now sum up the results to which we have been brought in three propositions. Firstly, science deals with objects as such, philosophy with the knowledge of objects. Secondly, science assumes that real knowledge is possible, philosophy inquires into the truth of that assumption. Thirdly, science deals with the relations of objects to one another, philosophy with their relations to existence as a whole. More shortly, science treats of modes of existence, philosophy of

existence in its completeness. And as existence may roughly be divided into the three great related spheres of Nature, Mind, and God (whatever these may ultimately be found to mean), there are three main divisions of philosophy: (1) Philosophy of Nature; (2) Philosophy of Mind; (3) Philosophy of the Absolute.[1]

[1] These distinctions are merely provisional. The result of the following inquiry is to show that Nature, Mind, and the Absolute are different phases of a single spiritual organism. See chapter viii., pp. 165-173.

CHAPTER II.

PHILOSOPHY OF AUGUSTE COMTE.

Now, it might seem that, having defined the problem of philosophy, and indicated its three great departments, our next step would be to take up each of those departments in turn. But, as we have seen, there are eminent thinkers, who, either expressly or by implication, maintain that man is by the very nature of his faculties for ever incapable of knowing reality as it ultimately is; and it is therefore advisable to begin by asking whether this sceptical attitude in regard to the object of philosophy has any rational foundation, or whether it does not rather rest upon an untenable assumption. Perhaps the simplest way of approaching this problem will be to examine it in the form in which it is presented by Comte.

The fundamental idea which underlies the doctrine of Comte is, that all attempts to obtain an "absolute" view of existence are necessarily futile. This Comte expresses by saying that, while we are capable of a "subjective synthesis" of existence, we are by the necessary limitation of our knowledge incapable of an "objective synthesis." Some explanation of these terms will be necessary. Comte here uses the term "subjective" in the sense of

"limited" or "human"; and with this he contrasts an "objective synthesis," as one in which things would be looked at from the point of view of absolutely complete knowledge. What he contends, therefore, is that man must be content to gain such a limited knowledge of the world and of human life as will enable him to make use of nature, simply for the perfecting of society. Thus Comte would turn our thoughts away from all speculations upon the ultimate meaning of existence, and concentrate them upon the good of humanity. For we find, as he maintains, a tendency to organization in humanity itself, and the aim of the individual is to live a higher life by seeking more and more to make himself instrumental in advancing the good of the race. This is the main idea in the philosophy of Comte, but it will be profitable to consider more in detail the process by which it is reached.

The starting-point in Comte's own intellectual development was his conviction of the falsehood of pure individualism, as preached by Rousseau and written in letters of blood on the French Revolution. The sum of Rousseau's teaching was that all the evils of man are due to society, and that he can reach perfection only by being freed from all restraint and allowed to follow his natural instincts. This doctrine of pure individualism was not justified of its children. Freedom from social restraint had not brought liberty but licence. Even in the economic region, the result was a fierce fight of individuals with one another, in which the stronger and more crafty worsted the weaker and less cunning. It was therefore natural than an attempt should be made to find a solution of the problem in a reconstruction of the fabric of society. One of the leaders

of this movement was St. Simon, who saw the essential weakness of the gospel according to Jean Jacques Rousseau, and tried to substitute for it a new gospel resting upon a socialistic foundation. The great problem of modern times, he held, was the combination of men with one another as a means of turning nature to the use of all. The physical as well as the intellectual and moral advancement of all the members of society ought to be aimed at, and especially the elevation of the poorer and weaker members of society. Liberty he regards not as valuable in itself, but only in so far as it is the means of a better form of social organization. The weakness of St. Simon is that, to secure this higher form of society, he would institute a social despotism that would sacrifice men's free intellectual and moral development in order to make them comfortable.

Now Comte, in his youth, was an ardent disciple of St. Simon, and from him he learned two things: (1) he came to see the essential weakness of pure individualism; and (2) he was led to seek for a solution of the social problem in the idea of society as an organism. The problem as it presented itself to his mind took this form: How can the organization of society be preserved, while yet the individual is not crushed by the despotic rule of the more cultured members of the state? And his answer was, that by the development of science, which is secured by the individual, and yet is the product not of caprice but of reason, there may be discovered the best means of securing the highest happiness of humanity.

The whole history of man is regarded by Comte as the history of association by means of positive science. Man in his primitive state has two opposite tendencies,—the

tendency to *sociality* and the tendency to *individualism*. The social instinct is at first weak, yet its triumph over the personal or selfish instinct is essential to the welfare and even the existence of humanity. Feeling rather than understanding this truth, the first leaders of mankind grasped at a mode of explaining the universe which had at least the merit of strengthening the social bond. Thus arose what Comte calls the *theological* stage of human development. Nature was supposed to be ruled by a number of supernatural beings. Such a mode of explanation was doomed to destruction. As men came to see more and more clearly that the world is governed by law, the gods were removed to a greater and greater distance, —Polytheism arose out of Fetichism, and Monotheism out of Polytheism. What at first seems but the gradual purification of theology is regarded by Comte as really a preparation for its final overthrow. The substitution of a limited for an indefinite number of arbitrary wills, and of one will for a limited number, were but steps in the process by which all interference of supernatural agents was denied.

The work of dethronement was continued by metaphysic. In this stage of development phenomena are explained, not by the arbitrary volitions of divine beings, but by abstract powers or essences, supposed to lie behind phenomena. These powers or essences were in reality but the ghosts of the vanished gods; in other words, the truth of the metaphysical era consisted in its *negation* of theology, not in any positive reconstruction of its own. The final triumph of metaphysic was in the reduction of the various powers of nature to the one abstraction of nature itself. This is a great advance, but its fundamental weakness is

that it still supposes nature to be something lying behind phenomena, and distinct from them.

The third stage in the development of humanity is the positive or scientific, in which man has at last come to see that for him the only realities are neither supernatural beings nor metaphysical abstractions, but the laws of the resemblance, the co-existence, and the succession of phenomena as these are revealed by positive science. Now, the extreme degree of specialization which the sciences have now reached makes it necessary to reduce them to a system; in no other way is it possible to turn the vast accumulation of facts to account for the furtherance of human welfare. This done, social benevolence will rest upon the secure foundation of scientific truth. The secret of the universe can be no further read than is necessary for the development of humanity, but man can give unity to his transitory existence by mastering the laws of phenomena, and especially the laws of his own nature and his immediate environment. To this task let him devote all his powers, abandoning for ever the useless and worse than useless task of prying into the unfathomable mystery of the great universe.

In illustration of this hurried sketch of Comte's law of the three stages, I may quote a few passages from the introductory lecture of his *Cours de Philosophie Positive.*

"I believe," says Comte, "that I have discovered the law of development exhibited by the human intelligence in its diverse spheres of activity,—a law which can be shown to rest upon a solid foundation by considerations drawn from the nature of our organization, and which is capable of being verified by a careful scrutiny of the past. The law is this: that each of our main conceptions, each

branch of knowledge, passes in succession through three distinct stages,—the theological or imaginative stage, the metaphysical or abstract, and the scientific or positive. In other words, the mind of man, by its very nature, employs one after the other, in each of its inquiries, three methods of explanation, the essential character of which is not only different but radically distinct: first, the theological method; next, the metaphysical; and lastly, the positive. Hence arise three mutually exclusive types of philosophy, or general systems, in regard to the totality of phenomena. The first yields the necessary starting-point of human intelligence; the third, its fixed goal; the second simply serves as a means of transition from the one to the other.

"In the theological stage, the human mind seeks to discover the inner nature of things, the first and the final causes of all the effects which strike the senses; in short, it aims at absolute knowledge, and regards phenomena as due to the direct and continuous activity of supernatural beings, more or less numerous, whose arbitrary intervention explains all the apparent anomalies of the universe.

"In the metaphysical stage, which is at bottom merely a modification of the theological, for supernatural agents are substituted abstract forces, entities, or personified abstractions supposed to be inherent in different classes of things, and to be capable of producing by themselves all the phenomena that we observe. The mode of explanation at this stage, therefore, consists in assigning for each class a correspondent entity.

"Lastly, in the positive stage, the human mind, recognizing the impossibility of gaining absolute conceptions of things, gives up the search after the origin and destiny

of the universe and the inner causes of phenomena, and limits itself to the task of finding out, by means of experience combined with reflection and observation, the laws of phenomena, *i.e.*, their invariable relations of similarity and succession. The explanation of facts, reduced to its simplest terms, is now regarded as simply the connection which subsists between diverse particular phenomena and certain general facts, the number of which is continually reduced with the progress of science.

"The theological reaches its greatest perfection when it substitutes the providential action of a single Being for the numerous independent divinities imagined to be at work in primitive times. Similarly, the highest point reached by the metaphysical system consists in conceiving, instead of a number of particular entities, a single great entity, called *Nature*, which is viewed as the sole source of all phenomena. So also, the perfection of the positive system, a perfection towards which it continually tends, but which it is highly probable it will never quite reach, would consist in being able to represent all observed phenomena as particular instances of a single general fact, such as, say, the fact of gravitation.

"We thus see that the essential character of positive philosophy is to regard all phenomena as subject to invariable laws. The aim of all its efforts is the precise discovery of such laws, and the reduction of them to the least possible number. What is called *causes*—whether these are first causes or final causes—are absolutely inaccessible, and the search for them is a vain search. Everyone knows, in fact, that in positive explanations, even the most perfect, we do not in any way pretend to exhibit the productive causes of phenomena, but only to

analyze with precision the circumstances of their production, and to connect them with one another by fixed relations of similarity and succession.

"Thus, we say that the general phenomena of the universe are *explained*, so far as that is possible, by the Newtonian law of gravitation, because, on the one hand, this theory shows the immense variety of astronomical facts to be the very same fact looked at from different points of view, viz., the constant tendency of all the molecules of matter towards one another in direct proportion to their mass, and in inverse proportion to the squares of their distances; while, on the other hand, this general fact is presented simply as the extension of a phenomenon with which we are all familiar, and which by that very fact we regard as thoroughly known, I mean the weight of bodies at the surface of the earth. But what attraction and weight are in themselves we cannot possibly tell; such questions do not belong to the domain of positive philosophy, and must be relegated to the imagination of the theologian or the subtlety of the metaphysician."

You must not take what has been said as a complete statement of the philosophy of Comte, but only or chiefly of that philosophy on its negative side. Comte's social philosophy, which is the most valuable part of his system, I have purposely passed over as foreign to our present subject. Now here we have a formulation of the main principle of Agnosticism—the unknowability of any reality beyond phenomena and their laws—a principle which is endorsed by many who would not accept his social philosophy. Our question therefore is, whether Comte and all who accept the general agnostic position are justified in denying to man all knowledge of the Absolute. Is such

a doctrine consistent with itself? Is it tenable? Can we limit ourselves in our inquiries to what goes on upon this "bank and shoal of time," shutting our eyes to all that may lie beyond it?

We must begin by pointing out an ambiguity in the doctrine of the Relativity of Knowledge, as expressed by Comte,—an ambiguity of which he was not himself clearly conscious. (1) In the first place, the doctrine sometimes means for him that the only true knowledge is of laws, not of causes. "What is called causes," he says in the passage quoted, "whether these are first or final causes, are absolutely inaccessible, and the search for them is a vain search." What Comte has here before his mind mainly is, that theology and metaphysics have, in his estimation, given a wrong explanation of the facts of nature. Homer, *e.g.*, tells us that Apollo

> βῆ δὲ κατ' Οὐλύμποιο καρήνων χωόμενος κῆρ,
> τόξ' ὤμοισιν ἔχων ἀμφηρεφέα τε φαρέτρην,
> ἔκλαγξαν δ' ἄρ' ὀϊστοὶ ἐπ' ὤμων χωομένοιο,
> αὐτοῦ κινηθέντος· ὁ δ' ἤϊε νυκτὶ ἐοικώς.
> ἕζετ' ἔπειτ' ἀμάνευθε νεῶν, μετὰ δ' ἰὸν ἕηκεν·
> δεινὴ δὲ κλαγγὴ γένετ' ἀργυρέοιο βιοῖο.
> οὐρῆας μὲν πρῶτον ἐπῴχετο καὶ κύνας ἀργούς,
> αὐτὰρ ἔπειτ' αὐτοῖσι βέλος ἐχεπευκὲς ἐφιεὶς
> βάλλ'· αἰεὶ δὲ πυραὶ νεκύων καίοντο θαμειαί.[1]

The fact here, Comte would say, was that a pestilence occurred among the Greek host encamped before Troy; but Homer, instead of attributing it to exposure to the intense heat of the sun and other physical conditions, personifies the sun as Apollo, and supposes the pestilence to be due to the wrath of the god. Yet false as the explanation is, there was here no attempt to answer an

[1] *Il.* I. 44-52.

insoluble problem. To attribute the pestilence to the arbitrary will of a supernatural being is to assign a "cause" instead of giving a law, but it is not to raise a question which, from the very nature of the case, can admit of no solution. The "*explanation*," as Mr. Lewes says, "so absurd in our eyes, was acceptable to the facile acquiescence of that epoch; and expiatory offerings were made to the irritated deity, in a case where modern science, with its sanitary commission, would have seen bad drainage or imperfect ventilation."[1] So in the metaphysical stage men speak of nature as active, forgetting that there is no "nature" apart from the special laws of phenomena. To say, *e.g.*, that "by virtue of her *vis medicatrix* (curative principle) nature cures a torn tissue or a broken limb, is as absurd as to say that death by poisoning must be attributed to a 'poisoning principle.'"[2] But, foolish and mischievous as all such explanations are, they are merely inadequate answers to questions that we are entitled to ask. They are provisional hypotheses which the advance of science sets aside. In the theological stage, men accounted for observed facts of experience by the arbitrary intervention of divine agency; in the metaphysical stage, they referred them to personified abstractions; but in both stages they were occupied with problems of perennial interest. In this sense Comte can only mean by the doctrine of the Relativity of Knowledge, that, with the progress of science, the confused and imperfect conceptions of an earlier age tend to disappear, phenomena being explained by laws of nature, not by supernatural agents or by metaphysical abstractions.

[1] Comte's *Philosophy of the Sciences*, p. 28.
[2] Lewes' *Comte*, p. 30.

Now, properly interpreted, the main contention of Comte may be accepted. So far as it merely says that the explanation of particular facts of experience is to be found in the statement of the uniformities obtaining among phenomena, not in the arbitrary will of supernatural agents or in hidden essences which are merely abstractions that tell us nothing, he is simply affirming the principle upon which all modern science rests. It is no explanation of a pestilence to say that an offended god sent it in his wrath, or that it is produced by a "poisonous principle." The universality and necessity of natural law, in other words, is a principle without which no progress in knowledge is possible at all. But what Comte does not see is, that when we have rejected such inadequate explanations of the facts of experience, we have not thereby banished religion and philosophy to the region of falsehood and error. Granting that the phenomena of nature occur in conformity with fixed and unchanging law, it does not follow that in science we have reached the extreme limits of our knowledge, nor would this follow even if we could reduce all phenomena to invariable laws of resemblance, succession, and co-existence. Before we can say that all theology and all metaphysic are but confused and erroneous explanations of the facts of experience, we must be able to show that in bringing phenomena under the dominion of law we have given an ultimate explanation of the universe, or at least the only explanation that is possible for us with our limited capacities. Unless this is firmly established—unless it is shown that there is no other problem to be solved but that which the special sciences set before us—we are simply starting from an unverified hypothesis, and falling into a mistake not less

disastrous than that of explaining experience by the fictions of a false theology and a false metaphysic. Now it may, I think, be shown that Comte *has* fallen into this fundamental mistake.

For (2), in the second place, in his doctrine of the Relativity of Knowledge, Comte also assumes that the human mind is necessarily limited to the knowledge of *phenomena*, and is conscious of its own limitation. This is the question which lies at the basis of all knowledge, and we must therefore subject it to the most careful scrutiny.

I have no desire to underestimate the force of the objection to the possibility of absolute knowledge. It is obvious that there is a sense in which man can no more claim to be perfect in knowledge than he can claim to be perfect in conduct. The shadow of ignorance accompanies us all through life, and as some things stand out for us in a clearer light we become more conscious than ever how little we know. The conceit of knowledge is most vigorous in those who have recently learned a few elementary truths, just as spiritual conceit is found in its purest form in men whose religious experience is of a rudimentary and undeveloped kind. The question, however, that is at present before us is not whether man has, or can have, *complete* knowledge, but whether what he calls knowledge is, strictly speaking, not the apprehension of things as they really are, but only of things as to his finite mind they seem to be. That this is the question will be evident if we draw out the meaning of Comte's limitation of knowledge to phenomena. Observe—

(*a*) That this limitation implies that there are two mutually exclusive realms—the realm of phenomena and

the realm of things in themselves. Within the former man is free to move. He can range at will through the whole of this domain, ever learning to know it more exactly and more fully. Thus he adds to his knowledge of the laws of mathematics, physics, chemistry, and biology, and, in Comte's view, of the laws of society and even of humanity as a whole. But beyond this he cannot go. He is as absolutely shut up within this limited sphere of existence as Mephistopheles was confined within the pentagram drawn by Faust. At the same time Comte implies that there is a realm of existence lying entirely outside the realm of phenomena. What is the nature of this realm man cannot possibly tell, his *knowledge* being only of the realm of phenomena.

(*b*) Before examining this doctrine further, it is important to see clearly all that it involves. Let us suppose, then, that there *are* two distinct realms—the realm of phenomena and the realm of things in themselves. At first sight the theory seems to imply that there is absolutely nothing in common between the two spheres. For, however far we may push our knowledge of phenomena, we never penetrate to the realm of ultimate realities. It is implied, however, that there actually *exists* a realm of realities, which might be apprehended if our capacities were different from what they are. We assume, in other words, that there are two kinds of intelligence—the finite or limited intelligence of man, and a higher kind of intelligence which is infinite or unlimited. We must therefore present the matter to ourselves in this way: The sphere of phenomena is the object of finite intelligence, the sphere of things in themselves is the object of infinite intelligence. Not only, therefore, does the theory of Comte

assume two kinds of existence, but it assumes two kinds of intelligence corresponding to them.

Now, if we allow these assumptions to pass unquestioned without asking by what right they are made, the conclusion of Comte, that man is incapable of knowing reality and must content himself with a knowledge of appearances, follows as a matter of course. But what Comte has not tried to do is to justify those assumptions. Every theory of knowledge must at least be consistent with itself, *i.e.*, it must not hold two principles that contradict each other. This, however, is just what Comte has done. In his theory, as we have seen, he makes a double assumption: (1) that there are two realms of existence; (2) that there are two kinds of intelligence. I think it may be easily shown that both assumptions are self-contradictory. It is one of the many incisive remarks of Kant, that Dogmatism always leads to Scepticism. In other words, if something is assumed without the previous question being raised whether it is compatible with the very possibility of knowledge, the logical result is the denial of all knowledge.

(1) It is said that there are two distinct spheres of existence—phenomena and things as they are. These two realms are supposed to be so different in their nature, that there is no point of contact between them. But (*a*) it is assumed by Comte that both are forms of *existence*. The phenomena that we know are not mere fictions of our own individual minds; they are real objects and events, occurring in a real world. On the other hand, Comte tells us, that we have no faculty by which we can apprehend the Absolute, and therefore we cannot go behind the veil of phenomena to see things as they are

sub specie aeternitatis. If that be true, does it not follow that the phenomena which appear to us have no proper reality? If we could contemplate the universe from a point of view higher than the human, all would be different. We should then be as gods, knowing existence in its real nature. But, confined as we are to a small section of the great universe, we cannot possibly do more than arrange in an orderly way the illusions that we call realities. In other words, we have no knowledge at all.

(*b*) On the other hand, Comte speaks of the objects and events that we perceive as *phenomena*. Now, a phenomenon is an *appearance*. Of *what*, then, are the objects and events that we apprehend "appearances"? They can only be appearances or manifestations of the absolute realities which do not appear. Manifestly, that is what Comte means. But, if things as they truly are present themselves to us even imperfectly, it cannot be said that our ignorance of them is absolute. Ignorance is the complete negation of knowledge, not an incomplete apprehension. There is, as Plato said, a middle-region lying between complete ignorance and complete knowledge, and partaking partly of the nature of both. To this form of apprehension, which Plato called opinion (δόξα), the knowledge of phenomena must correspond. A man is not blind because he is short-sighted. So if the objects that we know are really manifestations of absolute realities, we cannot be completely ignorant of those realities, though our apprehension of them may be incomplete. Comte's theory therefore involves this fundamental contradiction: it asserts, on the one hand, that we know *nothing but* phenomena and, on the other hand, that what we know are manifestations of reality.

(2) Comte's doctrine further implies, that there are two distinct *kinds* of intelligence,—that which apprehends phenomena only, and that which knows reality as it truly is. The self-contradictory character of this aspect of Comte's doctrine is even more apparent than the other. What would be the character of an intelligence that was absolutely limited to the apprehension of phenomena? Obviously, it would have no consciousness of its own limits. Appearances it would take for realities, and no advance in knowledge could ever suggest to it that its apprehension was only of appearances. The men of Plato's cave supposed that the shadows on the wall of their prison were the only realities, but they were not incapable of being liberated from their chains, going up to the light and seeing the sun and the stars. Comte's conception of human intelligence, on the other hand, is of an intelligence so absolutely limited in its apprehensions that it is absolutely incapable of any knowledge of absolute reality. Such an intelligence would not be aware of its own limitations. If I know that my knowledge is limited, I must also know something of what is beyond the limit. If we are conscious that the facts and laws that constitute what we call science are manifestations of absolute realities, it must be because our intelligence in some way comprehends both spheres. Comte's doctrine, however, is, that human intelligence is absolutely limited to phenomena, and therefore differs fundamentally from an intelligence that knows reality as it is. In other words, he holds that our intelligence is absolutely limited, or, in other words, is incapable of any comprehension of real existence. But, as we have seen, this is the same as saying that human intelligence is un-

conscious of its own limits. On the other hand, Comte, in affirming that our knowledge is limited, assumes that our intelligence discerns its own limitations. That is to say, he at once affirms and denies the consciousness of limitation, which is self-contradictory.

It seems to me, then, that the doctrine of the Relativity of Knowledge, as understood by Comte, rests upon a fundamental contradiction. It separates existence into two mutually exclusive parts—the phenomenal and the real—and it assumes two opposite kinds of intelligence. Both assumptions are self-contradictory. Existence is one, and intelligence is one. In other words, man must be capable of knowing reality as it truly is, and of such knowledge he is capable because in his intelligence is contained the principle by which the secret of existence may be discovered. I propose therefore to start from the principle that there is one intelligible universe and one kind of intelligence. This is not, I think, an assumption, because, as we have seen, any one who begins with the supposition that the universe is not intelligible, and that there are two kinds of intelligence, falls into insoluble contradiction.

But before attempting to apply the fundamental principle of the unity of the world and the unity of intelligence, in the construction of a system of philosophy, it seems advisable to say a few words on the distinction between absolute knowledge and knowledge of the absolute.

What gives plausibility to the Comtean doctrine of the Relativity of Knowledge is the manifest fact that knowledge is continually growing, and that it is still only in its infancy. But if we know only in part, how, it is naturally asked, can we claim to know the whole?

Now, it must be pointed out, to begin with, that this way of putting the problem assumes *that knowledge consists in adding particular to particular*, and, as a consequence, that a knowledge of the whole is possible only by summing up an infinity of particulars. So stated, the problem is manifestly insoluble. If we can know reality as it is only after we have exhausted all possible particulars, we shall never have a knowledge of reality. We must therefore begin by asking whether any form of knowledge, even the most elementary, can be correctly defined as the apprehension of particulars, and the extension of knowledge as an accumulation of particulars.

Now, I think it may easily be shown that a knowledge of mere particulars is a contradiction in terms. Take any instance of what would naturally be regarded as the apprehension of a particular, and it will be found to imply a universal. I have before me, *e.g.*, a piece of sugar. Now, certainly we should say that here, if anywhere, we have an instance of a pure particular. The piece of sugar I see is *this* piece, not any other. It is not like the *conception* sugar, which, as every one would admit, is not particular; but it seems to be a unique thing, separate and distinct from every other thing in the universe. Let us, then, go on the supposition that the piece of sugar is a mere particular. If so, I must apprehend it purely in itself, and as in no way dependent for its properties on anything else. Now, if I perceive this particular thing to be sugar, manifestly I must perceive its properties. Apart from the properties which characterize it, it would not be what it is. That is, I must apprehend the object before me as occupying a certain position: as cubical, hard, white, sweet, of a certain weight. Take

the property of position. This is a property which seems to belong to the sugar as a particular object. For the position which it occupies is unique, and cannot be occupied at the same time by any other object. But what is *position*? If it were possible to suppose that there was only one part of space, viz., that occupied by this piece of sugar, I could not say that the sugar had *position*. For the position of a thing is relative to the position of other things. This sugar is perceived as *here*, *i.e.*, it is distinguished from other objects that are not here. If there were no other actual or possible objects, I should not perceive the sugar as *here* or in this position. Position therefore does not attach to the sugar as isolated from all other objects, but only to the sugar as occupying a different part of space from other objects. But this contradicts our first view, that position is a property of this particular thing, the sugar. We might go on to show that every other particular object perceived has position only relatively to other objects. Manifestly, therefore, every so-called particular object exists in a single space, no part of which is peculiar to any one object. That is to say, space is a form of things which unites them together and makes them all belong to one world.

Now, there is no possibity of *perceiving*, or even of *imagining* space as a whole: extend our perception as far as we please and we never come to the end of space. Space must therefore be grasped, not by sense or imagination, but by thought. We can *think* space as one, though we cannot *perceive* it as one. But what is most important here is, that we cannot perceive any particular object as here, without thinking of it as belonging to

the one single space. Even in our simplest knowledge therefore, we are dealing not with particulars, but with particulars connected together in a unity. Knowledge is never of the mere particular.

I have brought forward this illustration of the sugar in order to show that knowledge is not a mere accumulation of particulars but a comprehension of the particular as a special aspect of one world. If there really were any true particular—any unique object absolutely independent of all others—it would exist in a world by itself; and therefore there would be as many worlds as there were particular objects. Now, even Comte would admit that all the phenomena that we know belong to one world. He is therefore bound to admit that in our apprehension of particulars we must presuppose that they are all parts of one world. More especially, he is bound to admit that every sensible object must, to be known at all, be known as occupying a certain definable position in the one single space which embraces all such objects. And if so, we can lay down this universal proposition: There can be no knowledge of any sensible object that is not in space.

We have learned then, that besides the particular aspect of an object there is always implied a certain universal aspect. I never can perceive a piece of sugar that does not occupy a certain relative position in space. I am not in my knowledge tied down to what I am perceiving at any given moment, but I can foretell the necessary conditions of all my perceptions, future as well as present. If so, is it not obvious that to have knowledge it is not necessary that I should have an infinite number of perceptions? When the *principle* of knowledge is discovered, we have at the same time discovered what holds true

universally and necessarily. If no sensible object can be apprehended at all that is not in space, we can say, without any limitation: Every sensible thing must occupy some position.

Let us see the bearing of this principle on the general doctrine of the Relativity of Knowledge. Comte argues that the continual advance of knowledge makes it impossible for us to claim that we know things as they are in their ultimate nature. For how can we say that we comprehend the whole universe if we know only a limited part of it? Now, the direction in which an answer to this difficulty lies may be seen from what has been said. It is not necessary to have a knowledge of all the aspects of the universe in order to show that we apprehend it as it truly is. For when we grasp the fundamental principle, without which a certain kind of knowledge is impossible, by that very fact we establish the absoluteness of our knowledge. However I may extend my knowledge of sensible objects, I cannot possibly apprehend a sensible object that is not in space. I can therefore say, that while my knowledge of the particular objects existing in the universe may be indefinitely extended, it can be extended only on the lines that I have hitherto followed. Science is continually adding to our knowledge of objects, but it does so in accordance with the nature of space, or—what is the same thing—with the principles of mathematics. Every scientific man assumes that no two bodies can be in the same part of space at the same time. Whether he is aware of it or not, this assumption can be seen to follow from the very nature of space, all the parts of which are mutually exclusive. It is substantially the same with the other principles of science.

The law of gravitation, *e.g.*, which Comte adduces as a striking instance of the triumph of the "positive" method, is not merely that every body attracts every other body so long as we perceive them; but that every body must always attract every other body. A law, in other words, is always the expression of a fixed relation that admits of no exception. The extension of knowledge can never overthrow the law, though it may show that it is only one form of a higher law. From all this it follows, that there is nothing in the progress of science to shake our faith in the absoluteness of knowledge. It is not claimed that we have all knowledge, but only that what we know expresses the true nature of things. The progress of knowledge always has two sides: on the one hand, it is an advance to a fuller apprehension of the particular aspects of existence, and, on the other hand, it is an advance to a better comprehension of the laws or fixed relations of existence. We cannot have the one without the other. The very idea of the progress of knowledge implies that as we advance we carry with us what we have already acquired. The course of science is not by discontinuous leaps: it is an evolution in which a principle already grasped is seen to involve a higher principle. But the higher principle does not destroy but only re-interprets the lower. Thus the principles of mathematics are not abolished by physics or chemistry, but are accepted and shown to involve more concrete principles. Biology does not destroy physics and chemistry, but only shows that they imply wider principles.

CHAPTER III.

PHILOSOPHY OF NATURE.

GEOMETRY.

PHILOSOPHY is an inquiry into the possibility and the conditions of real knowledge. As there are three real or apparent spheres of knowledge—Nature, Mind, and God—it will be convenient to begin by asking whether a real knowledge of nature is possible, and, if so, what are its conditions? This problem again breaks up into three subordinate problems—(1) Is there a mathematical knowledge of nature? (2) Is there a physical knowledge of nature? (3) Is there a biological knowledge of nature?

Mathematical knowledge, supposing it to be possible, is the science of magnitude. Now, magnitudes may be distinguished as either *continuous* or *discrete*. If I say, "It is a mile to the post-office," I imply that to get there I must proceed continuously from the place where I now am. On the other hand, in judging that the number of objects before me is twelve, I count or sum up units which are regarded as distinct or discrete. But we must further distinguish in continuous magnitudes between those that are *extensive*, or imply mutual externality, and those that

are *intensive*, or exclude mutual externality. Thus every part of space or time is continuous and extensive, whereas the magnitude of a force is continuous and intensive. Limiting ourselves at present to extensive magnitudes, we find that under this head come Space, Time, and Motion. The mathematics of space is *Geometry*; the mathematics of time has no generally accepted name, but it might be called *Chronometry*; the mathematics of motion is now commonly known as *Kinematics*. Let us begin with Geometry.

The object we have in view is not to construct a system of geometry, but to inquire whether it is a real science of nature. To this it must be added that the geometrical knowledge of which we speak is that which rests upon the supposition that space is of three, and only three, dimensions; in other words, that while three lines may be drawn in it at right angles to one another, it is impossible to draw a fourth line which will not coincide with one of the others. It cannot, of course, be said without investigation that a space of more than three dimensions is impossible; but as even those who maintain such a space to be possible do not claim that we have any direct knowledge of it, we may assume provisionally that space is only of three dimensions. Our question is therefore this: Do the propositions of ordinary or Euclidian geometry form a real science?

Mill, as we know, maintains that geometry is not a science, if by this we mean that its propositions express the real properties of things and are absolutely true. For these propositions, he contends, rest upon the assumption that there are real points, lines, surfaces, etc., corresponding to the definitions of geometry, and this assumption

is not borne out by facts. He further maintains that geometrical propositions rest upon induction, and therefore cannot be shown to be universal or necessary.

Is Mill right in saying that geometry is not an exact science? His doctrine may be put in this way. If geometry is a science at all, the elementary conceptions or definitions on which it rests cannot be mere fictions of the imagination, for no system of fictions, however consistent it may be with itself, can tell us anything as to the real nature of things. Geometry must therefore be based upon our perceptions of real things. But when we try it by this test, it is found to be wanting in precision and accuracy. Sensible objects possess, among other properties, a certain definite figure. This desk, *e.g.*, has a certain shape. To my unaided eye its edges seem straight, but if I put them under the microscope I find that they are only approximately straight. No sensible object can be found in nature whose edges are perfectly straight. In fact, "their existence, so far as we can form any judgment, would seem to be inconsistent with the physical constitution of our planet at least, if not of the universe." It is true that no error of any importance will be made by supposing the edges of objects to be straight which seem to be so, but this does not alter the fact that geometry does not express the precise nature of sensible magnitudes. The peculiar accuracy supposed to be characteristic of the first principles of geometry is therefore an illusion. The inferences which geometry draws from its premises are correct, but as the premises are only approximately true, the conclusions deduced from them share in the same want of precision.

It is obvious that, in denying the accuracy of geometrical

propositions, Mill takes it for granted that we have a knowledge of the actual properties of real things. The reason why a straight line, as defined in geometry, is not a precise statement, is, that no actual object can anywhere be found whose edge is perfectly straight. We know that as a matter of fact real things differ in their figure from the figures with which geometry deals. The contrast which is drawn is not between some reality that is unknown to us and reality as we suppose it to be, but between the sensible objects which we do know and the inadequate conceptions of them which are found in geometry. It is a possible hypothesis that we have no knowledge of reality as it truly is, and that to a perfect intelligence none of the properties that we ascribe to things really belong to them. Kant, for example, holds that to an infinite intelligence the geometrical properties under which objects present themselves to us are seen to be unreal. We suppose real things to lie apart from one another, and to have figure and size; but (from the point of view of a wider intelligence) these properties are merely the manner in which we present things to ourselves, not the manner in which they actually exist. There is no other way in which we can be conscious of things than by exhibiting them as in space, but this arises from a limitation which attaches to us as finite beings, and which prevents us from knowing reality as it truly is.

After what has already been said in regard to the doctrine of the limitation of human knowledge, we may assume with Mill that real things actually possess geometrical properties which we are capable of knowing. Nor does there seem any reason to dispute the view that no actual object can be found with its edges perfectly

straight, or with a figure exactly corresponding to a triangle, a circle, or any other geometrical conception. Does it follow from this admission, that geometry is not an exact science? It certainly *seems* to follow; for if we know the properties of real things to be different from what geometry assumes them to be, it is hard to resist the conviction that geometry is inconsistent with an actual knowledge of things, and therefore is not, strictly speaking, entitled to the rank of a science. We have therefore to ask whether Mill's conception of geometry is correct.

The first thing that strikes us is, that whether correct or not, Mill's view of geometry is not that which the mathematician would be inclined to accept. It is safe to say that Euclid, in defining a line as "length without breadth," did not mean that any actual object could be found in nature all length and no breadth. A line is not something that can be seen or felt. We can see or feel the edge of a sensible object, but we cannot see or feel a line. A line drawn on paper or on a blackboard is a visible object, but this is not the line with which geometry deals. A line that can be defined as "length without breadth" is from the nature of the case invisible and intangible. It is thus obvious that, in some sense, geometry does not deal with visible or tangible objects, but with invisible and intangible objects. How, then, it is naturally asked, can geometry be said to deal with real things? Are not all real things sensible objects? If so, does not geometry in dealing with objects that are not sensible, turn away from reality and operate with fictions of its own construction?

Now, here again it may be observed that the mathematician, while he is perfectly aware that the points,

lines, and circles with which he operates are not sensible objects, does not suppose that he is dealing with mere fictions of abstraction. He applies without hesitation the conclusions he reaches to the actual world. The whole of applied mathematics is a proof of this conviction. Hence, unless the mathematician is totally mistaken, there must be a sense in which geometry deals with the real properties of things, though it does not deal with their sensible properties. At first sight this seems to be self-contradictory; it apparently admits that things as they actually exist have sensible properties, and yet it claims that in dealing with non-sensible properties it is dealing with realities and not with fictions. Is there any way of avoiding this contradiction?

To answer this question we must ask what is implied in the knowledge of real things. By "real things" is here to be understood sensible objects existing in a space of three dimensions. To take a simple case, how do I know that this desk is an object in space, having a certain figure and size? Mill would answer that we obtain a knowledge of it by means of our senses; or, more precisely, by means of our sensations, actual or suggested. As I run my eye over the desk I have a series of sensations of colour; if I press it at any point, I find that I experience a feeling of hardness and of resistance; if I strike it with my hand, it gives forth a sound. At the present moment, when I am merely looking at the desk, I have no sensations from it of hardness, resistance, or sound; nor have I all the sensations of colour that I am capable of having from it by inspecting it minutely. My actual sensations are therefore limited to those of colour, and to some only out of the great

number which I am capable of having from this object. But, if you ask me what is the nature of the desk, I can recall in idea the various sensations I have formerly felt, and these suggested sensations I regard as indicating real properties not less than those I actually experience at this moment. The desk, therefore, so far as its sensible qualities are concerned, may be said to be a "permanent possibility of sensation."

At present I shall not dispute this account of how we obtain a knowledge of the sensible qualities of an external object. Our immediate concern is not with these, but with the geometrical properties. Granting that I know this desk by means of my sensations to be coloured, hard, solid, resonant, how do we obtain a knowledge of its position, shape, size, etc.? Are these also revealed to us in sensations, actual or possible? Mill would answer that they are. He speaks of "the exact resemblance of our ideas of form to the sensations which suggest them"[1] and of our "impressions of form."[2] I run my eye along the edge of the desk, and I have a series of impressions of colour which give me the perception of its straightness, or rather apparent straightness. This series of impressions, and others of a like kind, are the source and the only source of my knowledge of straight lines. It is true that I cannot have a perception of the edge alone, but I can concentrate my attention upon the edge, and neglect the other sensations actual and possible which make up my perception of a desk, including those of its breadth and height.

There can be no difficulty in showing that our perception of the position and figure of a sensible object is

[1] *Logic*, Bk. II., ch. v., § 5. [2] *Ibid.*, § 4.

not derived from sensation. If it is held to be so derived, it must be possible to state from which class of our sensations, or from what combination of sensations it is derived. Position or figure is not an object of sight, or it would be a colour; not of touch or the muscular sense, or it would be a feeling; nor of hearing, or it would be a sound; certainly not of taste or smell. Now, if the figure and magnitude of objects cannot be given in sensation, there is no other source from which, on Mill's theory of knowledge, they can be derived. The old saying, *Nihil est in intellectu, quod non fuerit in sensu*, is the cardinal principle of that theory. Whatever is present to our minds as an object must first exist, either in whole or in part, in our sensation. When I am not actually experiencing a sensation of colour from this desk, I may yet have an idea or image of it; but if I had never had the sensation I could not have the idea. Even the elements out of which pure fictions are formed must first have existed as sensations. The Cerberus of classic mythology was formed out of elements given in actual sensation. Imagination can associate sensations in an infinite variety of ways, but it cannot create a single new element. This being Mill's view of the nature of knowledge, he simply *must* hold that the geometrical properties of bodies are somehow given to us in sensation. Now, it is manifest that they cannot be given in individual sensations. No number of sensations of colour, hardness, resistance, or sound can present to me this desk as extended.

It may, however, be thought that, while extension is not given in any of these sensations separately, it yet is derivable from them in this sense, that a number of sensations

may be so *associated* as to appear extended. This is the view which Mill, following Hume, adopts. Thus he would say that, when I have repeatedly had a series of impressions of colour, as when I perceive the edge of this desk, they become so associated together, that though they are really successive they seem to be coëxistent. In this way it is thought that extension may be explained without aid from any principle but association. This explanation may be easily shown to be inadequate. It is admitted that sensations of colour are not themselves extended; hence no number of them, however they may be associated, can yield the perception of extension. It is no answer to say that by frequency of association they come to seem coëxistent when in reality they are simply closely successive; for the coëxistence of sensations of colour is simultaneity or coëxistence in time, not extension or coëxistence in space. If I look at this desk and at the same time hear the bell ring, the sight of the desk and the sound of the bell are simultaneous, but they are not coëxistent in space. Every attempt to reduce extension to simultaneity, or apparent simultaneity, of impressions owes its plausibility to the assumption of what it pretends to explain. Thus Hume, after asserting that our perception of extension is reducible to impressions of colour or hardness, goes on to speak, not of these, but of "points or corpuscles endowed with colour and solidity." As by a "point or corpuscle" he can only mean a coloured surface or solid, it is easy enough apparently to account for visible or tangible extension from sensations: the extension is simply assumed, in defiance of the fact that on Hume's own showing no sensation is extended.

We may conclude, then, that no geometrical property

of a sensible object can be derived from any number or variety of sensations, nor from any association of sensations. But, if the sensible figure and magnitude of individual objects is not explicable from sensation, Mill's explanation of the manner in which geometry obtains its data must be false. A sensible line, he says, has breadth as well as length; but "we can reason about it as if it had no breadth, because we have . . . the power, when a perception is present to our senses . . . of attending to a part only of that perception, instead of the whole." In other words, a sensible line is a coloured or tangible surface, but we can abstract, not only from its colour and hardness, but even from its breadth, and direct our attention only to its length. But we cannot abstract from breadth if there is no breadth to abstract from; we cannot attend to length if there is no length to attend to. You must catch your hare before you cook it. Mill's sensible surface, as we have seen, reduces itself to a number of sensations that are really or apparently simultaneous, but it contains no hint of extension either in length or breadth. There is therefore no material for abstraction to work upon, and the line of geometry is equally inexplicable with the sensible line from which it is said to be derived.

We come back, then, to the point that, granting the sensible properties of things to be sufficiently explained by sensation, their geometrical qualities cannot be so explained. Now, we cannot rest satisfied with that refuge of the destitute, the conclusion that we here reach an "ultimate inexplicability," which is simply another way of saying that our theory has broken down. There can be no doubt that we have the perception of sensible

objects as extended and figured, and it cannot be impossible to explain how we come to have that perception. The theory that sensation and associations of sensation account for the facts having failed, we must inquire whether there is not in the perception of an extended object an element or operation implied that cannot be described either as sensation or as an association of sensations.

. We have the perception of sensible objects as having position, magnitude, and figure. This is the fact to be explained. Let us first be clear as to what we mean by an "object." This desk may be viewed as an object, but so also may every particle of which it is composed. For the sake of simplicity, let us suppose that we perceive one of these particles. Now, according to the hypothesis from which we have started, the colour, hardness, and other sensible properties belonging to the particle may be explained by sensation, but not its position, magnitude, or figure. Let us ask, first of all, how we come to have a perception of the position of the particle. A very natural answer is, that we apprehend the particle as in a certain part of space, and thus come to know its position: in other words, position is supposed to be a quality belonging to this individual particle. If that is the case, obviously the particle would retain its position even if there were no other particle in the whole of space. Now, we need not trouble ourselves to ask whether the particle as it is in itself, or apart from our knowledge, has position as a quality attaching to it individually; for this at least is plain, that of position in that sense we have no knowledge. I apprehend the particle, it is said, as having a certain position in space. But what *is* its position? What part of space does it occupy? *Where*

is it? If I could perceive the whole of space, I might be able to fix the position of the particle by reference to space alone. Thus, if space were a sphere with a definite boundary, I might locate the particle as occupying a certain position on this sphere. But space has no boundary, or at least no boundary that we can perceive. No one ever saw the end of space. Hence I cannot locate the particle by reference to space. How, then, do I locate it? Manifestly by reference to other particles. Thus, if I view the desk as made up of a number of particles, I can determine the position of any one of them by reference to the position of the others. It thus appears that no individual particle as such has position, but that its position is fixed by reference to the position of other particles. In other words, position is not a quality attaching to the individual particle, but to individual particles in their relation to one another. What is the nature of this relation? It is a relation of pure externality or outwardness, and of outwardness as implying coëxistence. Observe also that the particles have position relatively to one another, because every part of this outwardness is exactly the same as every other part. Unless this were so, I could not determine the position of any one of them. If, *e.g.*, we suppose the particles to be at rest, and the distance between them to be continually contracting and expanding, we could not say that they had any fixed position. But the conception of distance as contracting and expanding is contradictory of the very idea of spatial outwardness. The particles may approach or recede from one another, but space always remains the same, and unless it did so, we could not perceive the particles to approach or recede from one

another. Thus, if two particles approached each other at the rate of one inch per second, and the space between them expanded at the same rate, we could not perceive the particles to move. What this shows is, that in the perception of the distance of one particle from another, we must necessarily presuppose that all the parts of space are absolutely alike.

We may see the same thing from another point of view. We have supposed that the sensible objects perceived by us are individual particles. But are there any purely individual particles? Obviously we cannot perceive a particle as concentrated in a point. For a particle to be perceived at all must admittedly be perceived as coloured or hard, and we cannot perceive a mere point as either coloured or hard. The supposed individual particle must therefore be perceived as having within itself parts that are external to one another. We cannot possibly perceive any object, however small, that is not perceived as having parts external to one another. Just as we cannot perceive a maximum of space, so we cannot perceive a minimum of space. Space is illimitable both as a whole and in every one of its parts. Now, if space cannot be perceived either as a whole or as a part, it is plain that it is not something that exists ready-made and can be apprehended or taken up by us as such. There must be in us a peculiar form of consciousness by which it becomes an object for us. What is this form of consciousness?

We have found that in the perception of objects, as in space, there is implied their mutual externality, and that this mutual externality is a relation. But the relation of mutual externality implies an act of *thought*, *i.e.*, a dis

crimination and yet relation of elements. If we do not discriminate the objects we cannot perceive them as external to one another; if we do not relate them to one another, we cannot perceive them as occupying any position. Now, this complex act of discrimination and relation is essential to every perception of an object, because apart from it the object could not be perceived at all. In other words, the conception of mutual externality is the absolute condition of there being for us any perception whatever. It is not a conception that can be derived from a perception, for without it there could be for us no perception. It cannot be reduced to sensation, for a sensation as individual cannot yield the consciousness of relation. Space or the mutual externality of the sensible is therefore the consciousness of the outwardness of sensible objects as constituted by the activity of thought. It is a purely intellectual element, and in no way a product of sense.

The perception of an object as in space thus involves a peculiar intellectual form of consciousness. It must not be supposed, however, that this form of consciousness could exist purely by itself. As we have seen, pure space is not of itself an object of perception. We perceive sensible objects as in space, but we cannot perceive space by itself. And the reason is, that space is simply the conception of the mutual externality of the sensible; it is a relation, and no relation has any independent reality. We can therefore say on the one hand, that apart from the sensible properties of things we have no consciousness of their geometrical relations; and, on the other hand, that apart from the geometrical relations of things we have no consciousness of their sensible pro-

perties. But there is this difference between the two elements implied in perception, that, whereas the sensible properties may widely vary, every sensible object is in space. Hence we can treat space as if it had a reality independently of all the other properties of objects; and this, as we shall immediately see, is the key to the peculiar character of geometry.

We are now in a position to estimate the value of Mill's view of geometry. According to that view geometry must express the precise nature of sensible magnitudes or it cannot attain to the rank of a real science. The points, lines, circles, etc., of which it speaks must agree with those that present themselves to us in our sensible experience. It is found that this harmony does not exist, and hence geometry is declared to be deficient in precision and accuracy. Now, after what has been said, it must be obvious that this view of geometry is fundamentally unsound. Geometry cannot deal with sensible points, lines, and circles, for there are no such magnitudes. If by a sensible point is meant the faintest impression of colour that we can have, there is no similarity between the point of geometry and this so-called sensible point; if it means the corner of a sensible object, it is not itself sensible though it is implied in what is sensible. All magnitudes in short are non-sensible. To perceive a particle as in space is to determine its position relatively to other particles, and the idea of position is just the idea of a point viewed by reference to particular things. We cannot see the position of a particle with our eyes, we can only think it as a limit in a continuous space. Similarly there is no sensible line. The edge of an object is not visible or tangible; it is merely

the *boundary* of the object, and a boundary can exist for us only through the conception of two surfaces as having a common limit. Hence geometry cannot deal with sensible magnitudes. With what then does it deal?

There is a sense in which every one is an unconscious mathematician. To present to oneself any sensible object whatever, one must be guided by the conception of externality, and of the absolute identity of every part of externality. But in our ordinary consciousness we do not make the relation of externality an explicit object of thought. Our interest is not theoretical but practical; we wish to know how far it is from one point to another, what is the size of this desk, or table, or chair, and hence the separation in thought of the conception of externality from its applications in individual existences is not made. We assume that there is no break in the continuity of space, and that if the length of one object is a foot, we shall find every other object which may occupy the same space to be also a foot; but we do not make the conception of spatial magnitude the exclusive object of our attention. This direction of attention to pure magnitude is the distinction of geometry from ordinary consciousness. What geometry does is to formulate the intellectual condition of the perception of individual magnitudes. It sets aside as irrelevant for its purpose the conditions of the perception of the sensible properties of things, and deals only with the conditions of the quantitative relations of things. But, as without the latter no perception of an object is possible at all, geometry may very well be called a science of reality. It is not a science of reality in its completeness, for reality as a whole has many other conditions besides those of quantity;

but it is a science of reality in that special aspect of it that geometry alone considers. We can thus see how geometry may be a real science without dealing with the specific properties of sensible objects. The knowledge of such properties is not identical with a knowledge of the fixed relations implied in their being extended objects, but it presupposes such fixed relations. I cannot distinguish the figure, size, or position of a body without presupposing the homogeneity and continuity of space. If I say, "This body is not perfectly round," I presuppose the conception of a circle: if I observe the edge of this desk not to be quite straight, I am testing it by the conception of a straight line, even if I have never heard of Euclid's definition of a straight line. Mill would have us believe that we *first* perceive objects as apparently round or straight, next confuse apparent with real roundness or straightness, and then concentrate attention upon this supposed roundness or straightness. He forgets that nothing exists for our knowledge except what actually enters into it. A man may pronounce an object to be round that is not round, but he cannot judge it to be round without having the conception of roundness. Thus even the false judgment, "This is round," presupposes the conception of a circle, though it need not be made an explicit object of consciousness or be formally defined as a line every point of which is equidistant from a central point. Again, when apparent is confused with real roundness, the confusion does not destroy the conception of roundness, but presupposes it. And lastly, when an advance is made to the judgment, "This object is not round," that which changes is not the conception of roundness, but the identification of the figure of a cer-

tain object with that conception. This illustrates the sense in which geometry is a real science. As expressing the figures that may be drawn in consistency with the conception of space as homogeneous and continuous, geometry enables us to make precise judgments in regard to the quantitative relations of real things. It tells us what are the conditions under which one given figure can alone be an object of our knowledge, and thus enables us to determine how far the figure of a given object deviates from the figure conceived. Geometry does not say that the edge of any object is straight, but it gives us a means of determining with absolute precision its deviation from straightness; in other words, it tells us what the character of an object would be if there were no other relations of things than those of position. So in other cases. There is an abstraction even within geometry itself. There can be no position of objects without figure, but figure does not affect position, and, therefore, the latter may be considered by itself. Then we advance from the point to the line, from the line to the surface, from the surface to the solid. But even if we could determine all the possible figures that are consistent with the conception of space, we should not completely determine reality. There are many other aspects of things besides the geometrical. Geometry, therefore, deals with abstractions in this sense, that it determines the conditions under which objects can be known as extended magnitudes, without determining the other conditions. The elements of reality with which it deals are real as elements, but they have no reality if they are supposed to be real purely by themselves. The only adequate conception of reality is that which implies a knowledge of

all the conditions of reality, and such a conception takes us a long way beyond geometry.

I think we may now conclude that Mill's denial of the accuracy of geometry has no real foundation. The definitions of geometry merely express the simplest relations between sensible objects in the way of pure externality, and the very nature of relations is that they are real without being sensible. If there were no law by which the relative position of bodies could be determined, we could say nothing in regard to their position, and so as to other relations of the same kind. Straight lines are what geometry defines them to be, circles have all their radii equal.

The next question is whether the propositions of geometry are universal and necessary. Mill, as we know, answers that they have no wider application than is warranted by observation. To say that "two straight lines cannot enclose a space" merely means that "all the straight lines that we have observed are such that they do not enclose a space." But we have no ground for saying, in the strict sense, that two straight lines *cannot* enclose a space. "We should probably have no difficulty in putting together the two ideas supposed to be incompatible, if our experience had not first inseparably associated one of them with the contradictory of the other."

A complete answer to this doctrine could only be given by showing that the supposition of a world which is spatially determined, and yet admits of the coëxistence of elements that in the world as present to our consciousness are incompatible, is a self-contradictory supposition. To attempt the proof of this view would at present lead us too far; I shall therefore merely endeavour to show that

if there is a world in which straight lines enclose a space, at any rate it is not a world of which we can ever have any experience. If this is proved, it will follow that the propositions of geometry are true, not merely as statements of what we *have* experienced, but as laws of what we always shall experience.

We propose to show, in other words, that the nature of our consciousness is such that any experience of the enclosure of a space by two straight lines is an impossible experience.

Mill holds that, as a matter of fact, we have never found the two ideas of intersecting straight lines and enclosure of a space associated, and this, he contends, is the reason why we suppose them to be necessarily disconnected. He assumes, therefore, that the picture or image of intersecting straight lines is a picture of which we have repeatedly been conscious. How did this image get into our consciousness? To this Mill would of course answer that it is due to an effort of abstraction by which we attend only to the direction of the two lines. But the lines as we perceive them are sensible lines: let us, for the sake of simplicity, say visible or coloured lines. We have, then, the image of two coloured lines as intersecting, *i.e.*, as not enclosing a space. On the other hand we may have the image of two coloured lines as meeting at both their extremities, *i.e.*, as enclosing a space. But we never have the picture of two coloured lines that at once intersect and meet. Yet we might, Mill maintains, have such an image.

Now, the question is this. What is implied in the consciousness of a picture such as Mill speaks of? A picture or image is necessarily individual. I cannot have

the image of a line that is neither straight nor curved, for such an object, whatever it might be, would not be an image. Nor, again, can I have an image of a line that is not sensible; for a non-sensible line would not be an image, but a relation or abstraction.

We have, then, before our minds the image of a line. What does this imply? The line is coloured, but the line cannot be defined as colour, for the colour may be changed while yet the image is in other respects the same. Suppose the image is that of a coloured straight line. How do we come to have such an image? We must be conscious of a colour as disposed in a certain direction, *i.e.*, as disposed so as to be straight. Now this image of a straight line cannot be present to our consciousness as straight unless we mentally draw the line. That is, we must produce one part after the other. And each part as coloured will, when it is produced, be a succession of colours, *i.e.*, we must have one sensation of colour after the other. Unless, therefore, we have a succession of colours, we can have no image of a coloured line. The succession of colours, however, is not the line; what constitutes the line is the manner in which these colours are disposed in the image; and that manner is that of uniform direction. It is therefore evident that the image of a line can be present to our consciousness only if we arrange the colours in a certain fixed way. If the colours are disposed irregularly, we shall have no image of a straight line. At first sight it seems as if the colours might be disposed in any order; but, on closer examination, it becomes obvious that there are fixed limits to their disposition. If I am to have the image of a coloured object at all, the colours must be in some direction—

straight or curved, or partly straight and partly curved. In other words, there is a fixed law in regard to the disposition of colours, if they are to form an image. The law is this: that they must be arranged as out of one another or as mutually external, and as mutually external in the three dimensions of space. If, *e.g.*, there were no mutual externality of the colours, they would vanish in a point, and a point cannot form an image. Every part of an image must therefore be of such a nature that any part of it is external to any other part. Hence, to have the image of a line is to produce each part as external to the others.

But our image must also be individual, *i.e.*, the parts produced as mutually external must be in a straight line or in a curved line. The image we have been considering is that of a straight line. The condition of the consciousness of a straight line is the mental production or construction of parts that are mutually external and yet are combined in a unity. Now this combination of mutually external parts is not given in the successive feelings of colour: it is an act of thought due to the activity of our minds. The image of a coloured straight line can therefore be present to our consciousness only if there is an act of combination which takes place in accordance with the principle, that all the parts of the line are (1) mutually external, (2) together, (3) homogeneous, (4) in one direction.

(1) Suppose mutual externality absent, and we should have no line, but a number of detached points. (2) Suppose they are not together, and we should have a vanishing series like the moments of time. (3) Suppose they are not homogeneous, and we should have parts of

different length, *i.e.*, we should really have a line of discrete parts. (4) Suppose they are not all in one direction, and we should have not a straight but a curved line of some form or other. Hence we can have no image of a straight line that contradicts any of these conditions. But if two straight lines enclosed a space, it must be because one or other of them, or both, is not straight. Thus we affirm and deny straightness. But if we deny straightness, we can have no image of a straight line, because the straightness is not in the sensations of colour, but in the manner in which they are disposed. Now, if we could have experience of two straight lines which enclosed a space, *i.e.*, of a line that was in two directions at once, it must be because we can form images that have none of the characteristics of those we do form. For a straight line that encloses a space is the same as one that is in two opposite directions at once. Such a line could not be a determination of space as we know it, but of a totally different space. Thus it would not be an image of the kind we know. Such an image could not be connected with those we have as belonging to the same world.

What Mill overlooks is, that all images of extended magnitudes are formed in consonance with the principle of the homogeneity of the parts of space. To suppose that we can have a sensible image which contradicts this homogeneity is to suppose that we can have an image which contradicts the fundamental condition of such images. The condition is not one that lies in the sensations, but one that lies in the manner in which they must be combined. We cannot present to ourselves the image of a coloured line that is in two directions at once

because such a colour would not appear to us as colour, every coloured line being necessarily pictured as in one direction or another. If a line may be in two directions at once, this means that it is not an image, and *if there is no image there can be no "association" of images.* All determinateness vanishes, and we are in a ghostly world in which we can present nothing as external. Now, if association of images is impossible, Mill's reason for denying the absoluteness of the connection of images vanishes. Where there is no possibility of making images at all there can be no association of images. Deny images, and Mill's objection falls to the ground. His argument in reference to the judgment, "Two straight lines cannot enclose a space," amounts to this, that we have never found subject and predicate together in our experience, but have only found repeated associations of subject and predicate. But there can be no *repetition* of an association where there is nothing to associate. Hence, if we deny the universality of the elements implied in our judgment, we are denying the possibility of both subject and predicate. To have either we must have both, *i.e.*, the relation is not variable, because its invariability is the condition of any image. A relation which is the condition of any object of consciousness about which we can judge at all is not variable but fixed. Hence we do not obtain geometrical propositions by a repetition of particular judgments; but each judgment is universal.

Let us now state somewhat more freely what we regard as the true view of the proof of mathematical judgments. Whatever we can present before our consciousness as an

extended magnitude is external to all other magnitudes, and if we distinguish parts in this extended magnitude, each of these is external to all the other parts, and to all parts that we can distinguish in any other extended magnitude. Now, we cannot perceive any part by simply apprehending it as in a particular or separate space. For, firstly, the particular space in which the part is cannot be regarded as a unit which admits of no further division; so regarded it would be a point, and that which is in a point, if there could be such a thing, would not be extended. Secondly, we cannot perceive space as a whole, and fix the position of the part by reference to this whole. To perceive space as a whole would be to have a perception of space as limited, *i.e.*, as having no space beyond it; and such a perception is impossible. We can only perceive one space as surrounded by another wider space, this by a still wider, and so on; but we can never reach a space beyond which there is no wider space. How then can we perceive an object as external to other objects? Only by combining data of sense in such a way as to present them as a single image, the parts of which are mutually external, *i.e.*, by relating the data of sense in such a way as to present them as in space. If this is not done there is no sensible image, and therefore no perception of an extended sensible object.

So far in regard to the perception of individual sensible images, *e.g.*, this desk, this chair. We may, however, reach a further stage of knowledge by neglecting the peculiarities of this and that sensible object, and directing our attention solely to the relation of mutual externality itself. This is what geometry does. In ordinary perception we

form images by applying the principle that every part of space is hómogeneous with every other, but when we make space itself an object we become conscious of this principle. The reason, then, why geometry applies to all sensible magnitudes is that it simply states explicitly the principle that the mind must make use of in having the perception of any object as extended.

From these considerations we may see that Mill's account of the manner in which geometrical judgments are formed is unsatisfactory.

Is every geometrical judgment *particular*? Is *any* such judgment particular?

His view may be stated as follows: In my experience I observe two sensible straight lines meet and then diverge further and further from each other. Thus I make the particular judgment: the straight lines AB do not enclose a space. On another occasion I again perceive two straight lines which do not enclose a space, and this yields another particular judgment: the straight lines CD do not enclose a space. Nor have we in our sensible experience ever found two straight lines enclosing a space. It may be objected, however, that the judgment, "the straight lines AB do not enclose a space," states more than is warranted by perception. For these lines are finite in length: "we cannot follow them to infinity; for aught our senses can testify, they may immediately beyond the furthest point to which we have traced them begin to approach and at last meet." Thus the judgment warranted by perception would seem to be, not that the straight lines AB do not enclose a space, but that the straight lines AB, so far as we have observed them, do not enclose a space. Such a proposition, so far from being

identical with the axiom of Euclid, that "two straight lines cannot enclose a space," *i.e.*, that *no* two straight lines can enclose a space, will not even warrant the judgment that the straight lines *AB* cannot enclose a space. Geometrical propositions would thus seem to be doubly particular, firstly, as not warranting a judgment about *all* straight lines; and secondly, as limiting what is said about particular straight lines to what has been observed. The subject, "no two straight lines," must run, "these two straight lines," and the predicate, "can enclose a space," must be modified to "enclose a space so far as our perception goes." Mill, however, refuses to limit the predicate of the judgment. It is true, he says, that we cannot perceive two infinite straight lines, but we can yet affirm that they do not enclose a space. For, if the two lines which we perceive to diverge ever do meet, it must be at a finite distance, and hence we can picture in imagination the manner in which they would present themselves to perception. Now, we cannot imagine two straight lines as diverging and then meeting at a finite distance; and hence we can say that the two straight lines *AB* cannot enclose a space. We are entitled, then, it would seem, to make such judgments as, *AB* cannot enclose a space, nor can *CD*, *EF*, etc.; but we are not entitled to say unconditionally, *No* two straight lines can enclose a space. For the only warrant we have for our particular judgments is that of particular experiences, and no number of particular experiences can carry us beyond those experiences. A universal judgment is merely a short-hand statement or summary of a number of par ticular judgments, and no summation of particulars can reach the infinite. The precise meaning of the axiom

"Two straight lines cannot enclose a space," is, "No two straight lines observed by us have enclosed a space." But this is not equivalent to the judgment, "No two straight lines can enclose a space." Generality is not necessity. There is nothing to hinder us from supposing that we might in our observation find two straight lines enclosing a space. Hence the axioms of geometry are not necessary truths, bnt generalizations from sensible experience.

According to Mill, then, the particular judgment, "These two sensible straight lines cannot enclose a space," is legitimate, but the universal judgment, "Two straight lines cannot enclose a space," is illegimate. It is, in fact, the assumption of the validity of the former which is made the basis for the denial of the latter. We have therefore to ask whether, on Mill's premises, we are entitled to make even a particular geometrical judgment.

It might be pointed out, as a contradiction in Mill's own theory, that he here assumes the possibility of two sensible lines being straight, whereas he has before maintained that no sensible lines are straight. This objection, however, we shall not press. Let it be granted that sensible lines are observed by us, and are observed to be straight. Now, it must be carefully borne in mind that the question here is not in regard to any sensible lines which may be supposed to exist in nature independently of our observation. Any one who affirms that there are such lines must be prepared to explain how we come to have a *knowledge* of them. No doubt there are many things in nature of which we have no knowledge, but if we affirm nature to be constituted in a certain way, we must be able to show that we have a knowledge of how it is constituted. It would therefore seem that the lines

affirmed to be straight are lines actually present to sense. Obviously such lines cannot extend beyond the visible lines perceived. How, then, can we say that the lines *AB* cannot enclose a space? This would mean, as Mill admits, that they would not meet however far they were produced. But we cannot have a perception of sensible lines beyond the point where they cease to be visible. Hence it does not seem that we are entitled to say, The lines *AB*, if followed out, do not enclose a space, but only that, so far as they have been followed out, they do not enclose a space. Mill is aware of this difficulty, and tries to meet it by saying that, though sensible lines are finite in extent, yet we can *imagine* them to be produced beyond the point of vision, and we are sure that the imaginary lines exactly resemble the real ones. No doubt; but there is no guarantee of reality in imaginary lines if Mill is right in holding all real lines to be objects of sense. If the sensible lines *AB* are one foot in length, the lines imagined as continuing these are not real, and to show that the latter do not meet tells us nothing in regard to the former. We cannot therefore consistently hold that the straight lines *AB* do not enclose a space; our judgment must be that the straight lines *AB* so far as our observation has gone do not enclose a space.

When we look more closely, however, we shall find that even this judgment goes further than is warranted by the data on which it rests. Mill evidently assumes that the sensible lines *AB* are shown to be real properties of objects, accessible to the observation of any one who looks at them. This, however, is an assumption. If I have no guarantee that two straight lines do not meet beyond the *point* observed by me, what guarantee

have I that they do not meet beyond the *moment* of my observation? It thus appears that my judgment must be still further limited. I must now say, not that two straight lines cannot enclose a space, but that these two straight lines, so far as perceived, and so long as perceived, do not enclose a space. For aught I can tell they may take a sudden freak when I am looking the other way, and alter their whole nature.

A still further limitation has to be made. When I say that the two lines now before me do not enclose a space, I am tacitly distinguishing between the lines as real and my perception of them. Such a distinction is not possible unless I regard my individual state of the moment as indicating a reality not determined by that state. I cannot indeed affirm that the lines in question are as they appear to me when I do not perceive them, but I must distinguish their appearance from their reality. But if I have no other guarantee for their reality than the sensation of the moment, I cannot go beyond that sensation. I am thus limited to the judgment: I have now before my consciousness two straight lines which do not enclose a space.

Only one step more has to be taken. Two straight lines as meeting and diverging is a complex image, in which there are at least two elements, the colour of the lines and their direction. But sensation can give only the colour: the direction of the lines, as we have already seen, is a relation involving an act of thought. Exclude this act of thought, and we are reduced to the mere sensation of colour, which is not a possible image at all but merely an element in an image. Thus the subject of the judgment disappears, and with it the whole judgment.

Mill's theory, then, does not explain even the judgment, "I am conscious of the straight lines AB as not enclosing a space," but is inconsistent with the possibility of any judgment whatever. But if there are no particular judgments, there can of course be no general judgments, which on his doctrine depend upon an inference from particular judgments.

The conclusion to which we have been brought confirms the result of our inquiry into the accuracy of geometry. If the assumption that a real line is merely sensible leads to the denial of all judgments, we cannot explain even the appearance of knowledge. A flux of sensations, supposing it to be possible, would not yield even the consciousness of the sensations forming the flux, much less the consciousness of any fixed nature in their content. A real line, in other words, is just one of the fixed relations by which perceptible objects are determined. Like all geometrical relations it rests upon the conception of pure externality. When we get at the right point of view it becomes obvious that no geometrical proposition is based upon induction, in Mill's sense of the word. That two straight lines cannot enclose a space is not a belief generated by repeated experiences of particular lines as not enclosing a space; it is a necessary proposition implied in the simplest perception. The reason we are apt to think otherwise no doubt is, that in our ordinary experience we make use of universal principles of which we are not explicitly conscious. Take the familiar experience of the two lines in a railway track. We speak of these as parallel to each other, because when we apply a measure at any point we find

that the distance between them is the same. What is implied in this inference? It is manifestly implied that there is outness between bodies, and that this outness is exactly the same wherever we measure it. Now, this is implicitly the judgment that parallel lines will never meet. We do not come to this conclusion by frequently observing that given parallel lines do not meet, but assuming constancy in the relations of outness, we affirm that these particular lines are parallel. Our direct interest, however, is not in the principle here made use of, but in the particular objects in question. If we are constructing a railway track, we are concerned to make the lines parallel, not to lay down the principle implied in parallel lines. Thus we seem to be making the merely particular judgment: These lines are parallel. In reality, however, the universal judgment that all equidistant lines are parallel is presupposed, and, if it were not presupposed, the particular judgment would not be true. It is not by accumulating particular judgments about parallel lines that we reach the general judgment; but the general judgment is implied in each of the particular judgments. Geometry simply states in the form of an explicit judgment the conception implied in every one of the particular judgments. Thus the propositions of geometry are universal, because they explicitly formulate the fixed relation which in the particular judgment is implicit. No induction or accumulation of particular judgments is needed, because the universal principle is already present in the particular judgment. Hence it is not surprising that Mill is at last driven by the stress of logic not only to deny that there are, properly speaking, universal judgments, but even to resolve particular judg-

ments into an association of particular mental states or images. Thus the judgment that two straight lines cannot enclose a space, merely means that we have frequently had the experience of the image of two straight lines accompanied by the image of their divergence, while we have never had the experience of such an image accompanied by the image of their enclosure of a space. The fundamental objection to this view is that it assumes as possible what it tacitly affirms to be impossible. If the image of straight lines is possible at all, as it is assumed to be, the image of their enclosure of a space is impossible. This may not prove that there cannot be a world in which straight lines enclose a space, but it at least proves that no such world can possibly be an object of our experience. The judgment is therefore not due to an association of images that are independent of one another, but there is *one single image* of such a character that we cannot be conscious of it as other than it is. In other words, every image implies the conception of an *unalterable relation* in the elements of sense.

CHAPTER IV.

PHILOSOPHY OF NATURE (CONTINUED).

ARITHMETIC AND ALGEBRA.

IN his Theory of Numbers Mill has two main objects in view: first, to show that arithmetic and algebra rest upon inductions from sensible observations; second, to prove that their supposed accuracy and precision arises from their hypothetical character.

First. The Science of Numbers rests upon Induction.—Mill does not here, as in the case of geometry, directly examine the *a priori* view, which maintains that arithmetic and algebra rest in no way upon sensible observation but upon pure conceptions; but indirectly he seeks to overthrow it by showing that their only basis is sensible observation. We can easily, if we choose, supply the missing disproof of the *a priori* view. The *a priori* philosopher, Mill would say, must hold that the proposition $2+2=4$ is an identical proposition, in which the predicate 4 is identical with the subject $2+2$; in other words, that it is impossible to conceive $2+2$ as forming anything but 4. Now to this view Mill would of course answer, that no real proposition can be based upon the inconceivability of the opposite, as has been shown in the case of geometry, for there is nothing to hinder us from supposing that in some other planet $2+2$ might $=5$. In fact Mill, when

he is dealing with the question of inconceivability, expressly says that the proposition $2 + 2 = 5$ is not self-contradictory, since we should "probably have no difficulty in putting together the two ideas supposed to be incompatible, if our experience had not first inseparably associated one of them with the contradictory of the other."

Assuming, then, that the theory of numbers is not an *a priori* science, it must rest upon inductions from sensible observations. Now this means that it cannot be based upon "logical definitions," *i.e.*, upon propositions which are purely verbal. The proposition $2 + 1 = 3$, if it is a logical definition, merely means that $2 + 1$ is another name for what is more neatly expressed by the term 3. This in fact is the view of the nominalists, who maintain that the only real things are individual things, and that the propositions of arithmetic and algebra are but an elaborate system of naming these things. If I see three chairs or three tables, each chair and each table is real; but when I call them three, I only mean that I give the name three to a group of three tables or a group of three chairs. Now Mill's objection to this view is, that it virtually denies the theory of numbers to be based upon *induction*. For, if we are limited to particular observations in this way, there is no transition from the known to the unknown, and therefore no induction. The nominalist therefore denies all *general* propositions, and thus makes a science of numbers impossible. Mill therefore has to show that arithmetic and algebra do really involve inductions, *i.e.*, inferences from particular observations to general propositions. He agrees with the nominalist in holding that the theory of numbers must rest upon particular observations, but he differs in maintaining that

from these particular observations general propositions are derived by a process of inductive inference.

What then, he asks, has led the nominalist to suppose that there are no general propositions in regard to numbers, or, in other words, that a general proposition is merely verbal?

The reason is that in arithmetical or algebraic operations we deal with *symbols* of sensible objects as distinguished from actual sensible perceptions or copies of these in imagination. In geometry we have before us either a sensible figure on paper or on a blackboard, or we form a mental image of a sensible figure; and thus it is evident that all our reasonings are about real sensible things. But in arithmetic and algebra we have no sensible object, and no image of a sensible object before us, and therefore we do not seem to be dealing with real sensible things at all. The reasoner has nothing in his mind during the process but the symbols or names, and hence it is natural to suppose that it is with the symbols or names that he is dealing. If that were the case, there would of course be no induction, for every induction is the process by which we pass from particular observations to a new truth not contained in these observations. Mill must therefore show that in every step of an arithmetical or algebraical calculation there is "a real inference of facts from facts."

Now the word *ten* represents an actual fact of sensible observation: it really means ten bodies, or ten sounds, or ten beatings of the pulse, and apart from such particular sensible observations the word *ten* would be meaningless. But the peculiarity of numbers is, that whatever is true of ten bodies is true also of every object of which we can have sensible observation. In this respect arithmetic differs

from geometry; for such a geometrical proposition as that two straight lines do not enclose a space is true only of lines, not of angles, or squares, or circles, whereas the proposition that $2+1=3$ is true of all sensible objects, since every such object consists of parts which can be numbered. Thus the number *one* will serve as a representative of *any* sensible object whatever, and hence the inferences we draw will hold of *every* such object. Accordingly, arithmetical propositions are based upon inductions from the observation of actual sensible things, and are not merely verbal.

There is another thing which gives plausibility to the nominalist view, that the theory of numbers deals only with names: the predicate seems to be identical with the subject. If we take a special case, such as "two pebbles and one pebble are three pebbles," we seem to be stating, not that the two collections of pebbles are *equal* in quantity, but that they are precisely the same or *identical*. But, in point of fact, what is really affirmed is not *identity* but *equality*. For what is meant is, that the same objects produce a different set of sensations when they are grouped in two different ways. And as this is a fact which holds good in all cases, we can say quite generally $2+1=3$. The science of number thus rests upon principles which, like those of geometry, are generalizations from experience.

Second. The science of number rests upon inductions which are not exactly true, but true only under the hypothesis that actual sensible objects are what they are assumed to be. In numerical calculations it is taken for granted that the objects numbered are identical as regards quantity. "But this is never practically true, for one

actual pound weight is not exactly equal to another, nor one mile's length to another; a nicer balance, or more accurate measuring instrument, would always detect some difference."

(1) Mill's first proposition is, that the science of number rests upon induction, *i.e.*, it contains inferences drawn from sensible observations; and in seeking to make good this proposition he is led to reject (*a*) the doctrine of the *a priori* school, who maintain that its judgments are not derived from experience, but are self-evident; and (*b*) the doctrine of the nominalists, who hold that its judgments are purely verbal.

Now (*a*) Mill is undoubtedly right in rejecting the doctrine that the truths of arithmetic and algebra are independent of all experience, and can be proved to be so by the logical principle of contradiction, *i.e.*, by the impossibility of conceiving the opposite. No proposition can be proved to be true on the ground that its opposite is inconceivable. The opposite of *every* proposition is inconceivable so long as we assume that the proposition is *true*, but not otherwise. Thus the opposite of the proposition, "Light is due to the transmission of material particles," is inconceivable so long as we assume the truth of the proposition; but if we deny its truth, there is no inconceivability in its opposite. Similarly we cannot conceive $2+1$ to be $=4$, so long as we assume the truth of the proposition, $2+1=3$; but if that proposition is denied, there is no inconceivability in its opposite. It is thus evident that we cannot base the truth of a proposition upon its inconceivability, but, contrariwise, the inconceivability depends upon its truth. The opposite of every true

proposition is inconceivable, but not the opposite of a false proposition. The *a priori* philosophers, therefore, in assuming that the truth of numerical propositions can be established by the inconceivability of their opposite, have really committed themselves to the view that such propositions are mere analyses of conceptions, or, in other words, merely state what is already conceived to be true. But manifestly the question still remains whether the conceptions are really true, and this question can only be solved by showing that real things are as they are conceived to be.

(*b*) Mill is also right in rejecting the nominalist doctrine, that the only realities are particular things, and that general propositions are purely verbal. The question is whether his own doctrine can consistently avoid the imperfections of nominalism. Mill evidently assumes that by sensible observation we obtain a knowledge of particular things as distinct from each other, and therefore as numerable, and that the process of induction consists in inferring that all particular things are similarly distinct from each other, and therefore numerable. To this explanation two objections have to be made. In the first place, pure sensation can give no distinction of one thing from another, because, as we saw in the case of geometry, each sensation is a purely individual feeling, and is therefore capable of revealing nothing but itself. It is only in so far as one sensation is discriminated from another that there is any consciousness of distinction. But this discrimination is an act of thought. Hence in the simplest form of knowledge the operation of the distinguishing and relating activity of thought is already implied. Now, number presupposes this activity of thought, and hence it is not correct

to say that by sense we obtain a knowledge of particular things as distinct from each other, and therefore as numerable. What is called sensible observation already implies the distinguishing activity of thought. In every act of distinction, therefore, there is implicitly a numerical judgment. But though all perception implies such a judgment, it is only when attention is directed to the quantitative element implied in every such judgment that we form *explicit* numerical judgments. And, when attention is so directed, we set aside all the *qualitative* aspects of things and concentrate our thought purely upon their *quantitative* aspects, or rather upon that quantitative aspect of them in which they are viewed as distinct or discrete, abstracting from all other aspects. The science of number is thus, from its very nature, abstract, *i.e.*, it sets aside for its purpose all other aspects of the real world except its numerical aspect. Hence the science of number never deals with the concrete objects of perception as concrete; it does not deal with pebbles and boxes as pebbles and boxes, but only with these in so far as they are *identical*, *i.e.*, as discrete units capable of being discriminated from each other, and therefore of being counted. If the objection is raised, that the science of number must deal with real things or it will be no science, but a mere fiction, the answer is that no science deals with real things in their completeness, but only with real aspects of real things, and that number is therefore a science in the same sense as other sciences. Mill's mistake is in assuming that number must deal *either* with sensibles *or* with mere abstractions, whereas it really deals with the sensible *as* abstract, *i.e.*, with an abstract but real element of existence.

But, secondly, bearing this in mind we have no difficulty in seeing that number does not rest upon induction, in Mill's sense of the word. On his view, we must suppose that we have a number of particular observations of sensible things as numerable, and then infer that all sensible things are numerable. For induction, as he explains it, is the process of inference by which we pass from some to all. If this were a true account of the nature of induction, every general proposition would be based upon a pure assumption, which admits of no possible justification. For how can we legitimately conclude that *all possible* sensible things are numerable if our data give us only *some* sensible things? Mill, therefore, if he were consistent, would limit himself to *particular* numerical propositions, and deny that there are any true *general* propositions, *i.e.*, he would take the same view as the nominalists.

This may be shown in another way, if we consider his admission that $2+1$ *might* make 4 in another planet, for this startling conclusion is just the legitimate inference from his doctrine that all general propositions are inferences from particular propositions. Here, in fact, he tacitly admits that beyond those particular propositions we have no right to go, and that general propositions are due merely to the illegitimate extension of particular propositions under the influence of association.

Mill's doctrine, then, that number rests upon induction from particular propositions cannot be accepted. The true view is, that in the simplest numerical judgment the universal judgment is already implied. For since discrimination is presupposed in even the simplest and most elementary consciousness as its necessary condition, number is implicit in every act of consciousness. In other

words, we can give no explanation of consciousness at all, and therefore no explanation of a particular numerical judgment, unless we admit that every distinguishable element of consciousness is numerable. The numerical relation of things is therefore shown to be absolutely necessary, because without it there would be no consciousness at all. It is, in other words, a fixed and unchangeable relation of every possible element of reality that each element is not identical with any other element of reality, *i.e.*, that it must be counted as a unit among other units. In numerical judgments, then, we do not pass from some to all, but in *each* judgment *all* is implied.

(2) After what has been said, we need not spend much time upon Mill's second point, viz., that the theory of number rests upon a hypothesis which is not strictly true. The hypothesis is, that each unit is the same as every other, whereas it is impossible to find in nature any two units exactly the same. The whole force of this reasoning evidently rests upon the assumption, that the science of number can be a real science only if its judgments are derived from sensible things. But if, as we have maintained, its aim is to state what holds good of all things only in so far as they are looked at from the point of view of discrete magnitude, the fact that any given object differs in its size or in its weight cannot in any way affect the absoluteness of the science of number. And not only so, but no difference in the size or weight of a particular object could be discerned, unless we presupposed the absoluteness of quantitative relations. We could not possibly tell that one pound or one mile was not equal to another pound or another mile, unless the standard of measurement were absolute. There is therefore no

hypothetical element in the mathematical sciences, unless we falsely assume that these sciences formulate the complete nature of things. Viewed as expressing certain unchangeable relations which are presupposed in all our knowledge of real things, mathematics is not a hypothetical but a necessary science.

CHAPTER V.

PHILOSOPHY OF NATURE (CONTINUED).

THE PHYSICAL SCIENCES.

INDUCTION.

WE have seen that, according to Mill, mathematics rests upon sensible observation; and we naturally expect to find him giving the same explanation of the foundation of other sciences. But first of all he seeks to distinguish the inductive process by which the generalizations of science are reached from various logical processes which are often confounded with it. In the first place, induction is not the mere registration in language of a given number of individual observations. No single observation, and no number of single observations, is an induction, because here there is no inference from the known to the unknown. The observation, that the moon shines by the sun's light, no one would call an induction; nor can there be any induction in the successive observations that Mars, Neptune, Saturn, and the other planets each shine by the sun's light. And if we collect all these separate observations in the proposition, that "all the planets shine by the sun's light," we are merely recalling what we already know, not advancing to any new truth. In the second

place, there are certain mathematical propositions which are improperly called inductions; as, for instance, the proposition that a straight line cannot meet any section of a cone in more than two points. And, lastly, the description of a set of observed phenomena is not induction. Thus Kepler, after observing a number of the places successively occupied by the planet Mars, found that when joined together they formed an ellipse. The proposition that Mars described an ellipse was therefore merely the summary of a number of different observations, not the inference to a new truth not contained in those observations; and hence it cannot be called an induction.

What, then, is an induction? It is defined by Mill as the process by which we infer that what we know to be true in a particular case or cases will be true in all cases which resemble the former in certain assignable respects. The "resemblance" may be either (*a*) that of individuals belonging to a class, or (*b*) that of the same individual at different times; but, in either of these cases, the essence of the induction consists in making a really "general" proposition, *i.e.*, one which holds good, when we pass from the particular to the universal. Thus, the conclusion that "all men are mortal" is an induction, because we pass from what we know of *some* men to *all* men. Similarly, when Kepler inferred that, as the orbit of Mars had *hitherto* been elliptical, it would *always* be elliptical, he made a genuine induction.

Now, if induction implies in all cases a transition from the particular to the universal, it is naturally asked by what right the transition is made. It is obvious that, in every case of real induction, we tacitly assume that what holds good in the cases observed will hold good

in all similar cases; we assume, in other words, that the course of nature is uniform. What, then, is the justification of that assumption? Mill answers that it is itself an instance of induction, and by no means one of the most obvious or the earliest. But, before attempting to prove this, he asks what precisely is meant by the "uniformity of nature."

(1) It is obvious that by the uniformity of nature it is not meant to exclude infinite diversity. Nobody expects one day to be the mere repetition of the previous day. Yet there is a natural tendency in the human mind to expect that phenomena which have frequently presented themselves in combination will always recur in the *same* combination. This method of *inductio per enumerationem simplicem* is rightly condemned by Bacon. It would be legitimate only if we were certain that we had exhausted all the instances, and such certitude is practically not obtainable. The truth is that induction to be valid does not depend upon the *number* of instances observed, but upon something very different. A single instance may be sufficient in one case, a million may not be enough in other cases.

(2) If, then, the uniformity of nature does not mean invariability, what is its true meaning?

The first thing to observe is that by the uniformity of nature we should understand a number of uniformities. These uniformities, when reduced to their simplest expression, are called laws of nature. Three such laws are these: (1) that air has weight, (2) that pressure on a fluid is propagated equally in all directions, (3) that pressure in one direction, not opposed by equal pressure in the contrary direction, produces motion, which does not cease until

equilibrium is restored. From these three laws or uniformities the rise of mercury in the Torricellian tube might be predicted. But this is not properly a law of nature, but a result of the three laws of nature mentioned. Every true induction is therefore either a law of nature, or a result of laws of nature; and the problem of induction is to ascertain the laws of nature, and to follow them into their results.

CAUSATION.

Now, laws of nature are of three kinds: they are either (*a*) laws which apply indifferently to synchronous or successive phenomena; (*b*) laws which hold only of synchronous phenomena; or (*c*) laws which hold only of successive phenomena. (*a*) The first sort of laws are those of *number*, which hold whether the phenomena are synchronous or successive. Thus, $2 + 2 = 4$, whether we are speaking of two coëxistent objects or of two events. (*b*) The second set of laws are those contained in *geometry*, which apply only to coëxistent objects. (*c*) The third set of laws are those which express uniformities in the way of *succession*. It is with these only that we have here to deal. It has already been shown that the laws of number and of geometry are inductions, and the question is as to the inductions which concern the *succession* of phenomena, or rather the principle which is presupposed in all such inductions. That principle is causation. The ground of induction, so far as successive phenomena are concerned, is the law of causation, which may be thus stated: "Every fact which has a beginning has a cause." What, then, is a "cause"?

By a "cause" is to be understood in all cases a

phenomenon, *i.e.*, a particular fact or event. Whether there are causes which are not themselves phenomena we shall not inquire. There are certain thinkers (the Cartesians, for example) who hold that, besides *physical* causes, there are also *efficient* causes, *i.e.*, causes which, without being themselves events, *produce* events. But, whether there are such causes or not, at any rate these are not at present in question. In affirming that every event has a cause, we are only affirming that every phenomenon in nature is invariably preceded by some other phenomenon.

Now, as there are at any given instant many phenomena, each of these is preceded by another phenomenon, and invariably preceded by it. A cause is thus an "invariable antecedent" or "set of antecedents," an effect, an "invariable consequent." There are many antecedents or sets of antecedents $= A$, B, C, D, etc., and many consequents $= \alpha$, β, γ, δ, etc., and each of these is separate and distinct from the others. To find out such antecedents is to perform an induction, so far as the succession of phenomena is concerned. If there were any event which had no such antecedent, no induction could take place. The universality and certainty of the law of causation is therefore the basis of all induction as to successive phenomena.

A cause, then, is an antecedent or set of antecedents. But it seldom, if ever, happens that there is only one antecedent of a given consequent. In ordinary language one of these antecedents is singled out and called the *cause*, the others being distinguished as conditions. But the real cause is the whole of the antecedents, *i.e.*, all the conditions without which the consequent would not exist. The reason why one antecedent is specially

selected as the cause, is, that it alone is an *event*, the others being *states*, which existed prior to the effect, but did not begin to exist immediately prior to it. It thus seems that a cause is the sum of antecedents without which a given event does not take place, but that of those antecedents the greater number are not themselves events. It has to be added that in considering the sum of conditions, we must take into consideration the *negative* as well as the *positive* conditions, *i.e.*, those facts which must be absent if the consequent is to take place. The full definition of cause, therefore, is, "the sum total of the conditions, positive and negative, taken together, upon which the consequent invariably follows."

This view of causation does away with the absolute distinction of agent and patient. A stone falls to the earth, and it is said that the earth acts, and the stone is acted upon. But it is just as correct to say that the stone attracts the earth, as that the earth attracts the stone. The distinction between agent and patient is purely verbal, since patients are always agents. All the positive conditions of a phenomenon are agents, in the sense that without the whole of them the consequent could not take place.

The cause of anything is "the antecedent which it invariably follows," but it is not "the antecedent which it invariably *has* followed in our past experience." The sequence must be not only invariable but *unconditional*. Hence we may define a cause as "the antecedent, or the concurrence of antecedents, on which a phenomenon is invariably and *unconditionally* consequent."

It may be admitted that there are cases in which the cause may not be antecedent to an effect, but simul-

taneous with it. But this is a matter of minor importance. To avoid the difficulty, a cause may be defined as "the assemblage of phenomena, which occurring, some other phenomenon invariably commences." An effect, at any rate, never precedes a cause, though perhaps it may be simultaneous with it.

Among the causes of phenomena some are *permanent*, *i.e.*, have subsisted ever since the human race has been in existence, and for an indefinite time previous. Such are the sun, the earth, and planets, with their various constituents, air, water, and other substances. We cannot account for the origin of these causes themselves, nor can we tell why they are distributed as they are, or why they are commingled in certain proportions. These permanent causes are sometimes not objects but recurring events, such as the rotation of the earth. But though we cannot trace these causes back to others, all other things or events are the immediate or remote effects of those primeval causes. Hence the state of the whole universe is the consequence of its state at the previous instant, and if any particular state could ever occur a second time all subsequent states would also recur, and history would repeat itself. That this does not happen arises from the fact that no two states of the universe are identical.

How far can Mill's account of induction, and especially of that form of induction which consists in the discovery of causes, be accepted? So far as induction is maintained to be an inference from 'some' to 'all' resting upon resemblance, it is inadequate. Induction always consists in the discovery of *identity*, not of *resemblance*. It is of

course true that in every instance in which an identity has been discovered there must be resemblance, but the induction is not, and cannot be, based upon resemblance. The reason why "all men are mortal" is not that they resemble one another in other ways, and therefore also in the way of "mortality," but because they are identical in the possession of a body which cannot permanently resist the external influences against which it reacts. Certainly, there never is any identity of nature between two things which in no way resemble each other—for no two things can be found which are not similar in certain respects and different in others—but the closest resemblance will not entitle us to affirm identity, and without identity there is no induction.

Is Mill's account of causation more satisfactory than his account of induction?

(1) Mill is undoubtedly right in rejecting the conception of a mysterious "power" in one thing to bring another into existence. A body falls to the ground if unsupported, but the earth does not contain within itself any occult "power" by which it draws the stone to itself, nor does the stone contain any occult power of gravitation by which it moves to the earth. The *fact* is this, that when a body is placed at a certain distance from the earth it begins to move towards the earth at a certain velocity. If it were beyond a certain distance it would not so move. The fact we may state by saying, either that the stone is attracted by the earth, or that the stone falls by its own weight; but the essence of the fact is the motion of the stone under certain fixed conditions. Given these conditions and the effect takes place.

(2) Mill, however, goes on to say that a "cause" is an

"invariable antecedent" or "set of antecedents," an effect, an "invariable consequent." Two questions arise here therefore: I. Is a cause an "antecedent"? II. Is it an "invariable" antecedent?

I. (*a*) At first sight it seems as if every effect were a consequent, seeing that it is an event or change. But it is to be observed that we cannot affirm an event to be a "consequent" merely because it is sequent on something else. No doubt there can be no event that does not imply sequence; but it is not proved to be a consequent merely because it is an event. To call an event a consequent is to imply that its cause is antecedent to it, or existed prior to it. But this assumes that the cause cannot be *simultaneous* with the effect. Now, in the course of his inquiry, Mill admits that a cause may not be antecedent to its effect, though he says that the point is of little or no importance. Whether it is of importance or not, it at least compels us to revise the first definition which Mill gives of cause. We can no longer say that a cause is an "invariable antecedent": we must now say that a cause is that which invariably precedes or accompanies a certain event, an effect that which invariably follows or accompanies its cause.

(*b*) Can we accept this revised definition? It is obvious that it presupposes a separation between cause and effect, such that each is an independent phenomenon, not depending for its reality upon the causal relation. Whether the phenomenon or sum of phenomena called the cause precedes or accompanies the phenomenon called the effect, the one exists apart from the other. Thus, the formation of water is one phenomenon, and the bringing together of oxygen and hydrogen in the proportion of two to one

is another phenomenon or rather sum of phenomena. Here the cause seems to precede the effect. Again, fire is the cause of warmth, but the fire is one phenomenon and the warmth is another, though here the cause and the effect seem to be simultaneous, not successive. If, however, we look more closely, we shall find, I think, that the supposed distinction and independence of cause and effect cannot be maintained. Take the case of the formation of water. It is true that oxygen and hydrogen may exist as separate phenomena, and that as long as they are separate they are distinct from water. But oxygen and hydrogen in their separation are not the cause of water. As Mill himself points out, the cause is the sum total of the conditions. Hence oxygen and hydrogen must be brought together before they can be the cause of the formation of water. When do they become the cause? Only at the moment when the formation of water takes place. Obviously, therefore, the cause is not antecedent to the effect, but must at least be simultaneous with it. But is even this account correct? What has become of the hydrogen and oxygen at the moment when the water is formed? They have ceased to be hydrogen and oxygen, and become water. In other words, the formation of water is precisely the same fact as the union of oxygen and hydrogen; *i.e.*, the cause neither precedes nor accompanies the effect but is *identical* with it. Thus in discovering the cause of the event we are simply discovering an *identical relation*. The difference between a cause and an effect is not the difference between one phenomenon and another, but consists in the discovery of the fixed nature of the one single fact or phenomenon.

Take the other instance of fire and heat. Nothing

seems to be more certain than that we have here two distinct phenomena. The fire does not cease to exist because no one feels its heat; the heat does not at once cease when one is out of range of the fire. Thus the cause and the effect seem to be two distinct phenomena, which are only externally related to each other. But here again it must be observed that the fire is not a cause of heat except in so far as heat is actually produced. Not only so, but, as Mill himself tells us, the cause is the sum of conditions without which the effect could not take place. Now among these conditions the sensitive organization of the subject is indispensable. There is no sensation of heat in any but a living being. The cause of heat is thus the excitation of the living organism, under certain physical conditions. But the excitation of the living organism *is* the sensation of heat, *i.e.*, the cause is simply the effect resolved into its constituent elements or conditions. Wherever these conditions are present, heat exists; in other words, heat is a fixed relation obtaining between distinguishable phenomena. And as there is no meaning in saying that the relation called the cause precedes or accompanies the relation called the effect, the cause neither precedes nor accompanies the effect, but is identical with it. In the same way it might be shown that every instance of causation is the apprehension of a fixed relation.

II. If then a cause is identical with an effect, it is plain that we cannot say that a cause invariably precedes, or even that it invariably accompanies, its effect. What then is the meaning of "invariable"? It can only mean necessary or universal. Hydrogen and oxygen in the proportion of two to one necessarily form water, because

their union is involved in the unchanging constitution of things. That it is so is a fact, and a fact grasped, not by sensible observation, but by thought. There is no difference in principle between the chemical law, H_2O, and the geometrical proposition that the interior angles of a triangle are equal to two right angles. The one fact is as necessary as the other. This is virtually admitted by Mill when he tells us that a cause is not only "invariable" but "unconditional"; for "unconditional" can only mean "universal" or admitting of no exception, and therefore belonging to the unchangeable nature of things.

A cause, then, is neither an invariable nor an unconditional antecedent, but an unchangeable fact. Mill says that the distinction of agent and patient is purely verbal, since the patient is in all cases an agent, in the sense of being one of the antecedents. It would be more correct to say, that the whole distinction of agent and patient is false. When a stone falls to the earth, neither the stone nor the earth can be regarded as agents. This way of looking at the matter supposes that the stone and the earth have each a separate and independent existence, and that each would be what it is even if the other did not exist. Now, it is of course true that the whole nature of the earth is not exhausted in its relation to the stone, or the whole nature of the stone in its relation to the earth. But when we are seeking for the cause of the fall of the stone, we purposely set aside all the characteristics of the earth and the stone except the fact of the motion of each towards the other. The fact to be explained is therefore purely the approximation of a body of a certain mass to another

of a much greater mass, and this fact stated in its precision constitutes the cause. The cause is discovered when it is seen that bodies move towards each other (unless there is some negative or counteracting condition) in proportion to their mass and inversely as the square of their distance. This is a *fixed* relation, and therefore it applies in all cases. But as it is a *relation*, there can be no more meaning in calling either of the masses the agent or the patient than in calling either the antecedent of the other. Neither, taken by itself, is a cause or an effect; the cause is the relation between the two masses viewed as unchangeable, and the effect is the same relation viewed as manifested in the particular movement of the one towards the other at a certain rate.

This view of causation explains why we do not suppose invariable succession to establish causal connection. If Mill were right in saying that a cause is an "invariable antecedent," all invariable antecedents ought to be causes. But, if a cause is never an antecedent, we at once understand why we distinguish invariable succession from causal connection. Night and day have invariably succeeded each other in all human experience, but the one is never supposed to be the cause of the other. The reason is that they are not related as cause and effect, but as distinct facts, each having its own cause. The conditions under which night occurs are as unchangeable as those under which day occurs, but they are not identical, and therefore the one is not the cause or the effect of the other. Each involves an identity, but it is a different identity.

The last distinction drawn by Mill is between *permanent* and changeable causes. The sun, the earth, the planets

are permanent causes, as also the rotation of the earth; the phenomena of life, on the other hand, could not exist before the origination of living beings. In drawing this distinction Mill has gone entirely beyond the question of causation and has introduced a new problem. All that causation tells us, is, that no event occurs which does not imply fixity of conditions: that wherever the same conditions exist the same event must occur; but it does not tell us that the same conditions have always existed, or will always exist.

Thus, if living beings with an organism so differentiated as to have the senses of sight, hearing, taste, smell, and touch exist, the sensations relative to their senses will occur according to fixed laws; but it by no means follows that such beings have always existed or always will exist. The causes of sensation are therefore not permanent in the sense of continuing through all time: they are only permanent in the sense that they are always the same when they occur. But the same holds good of what Mill calls permanent causes. No doubt the earth existed prior to the appearance of living beings upon it. But this only means that there were causes which took the form of the relations of material masses to one another, before there were causes which took the form of the relations implied in the sensations of living beings. Whether material masses have always existed the law of causation cannot determine: that is a question which takes us beyond the point of view of causation, and compels us to ask what is the ultimate condition of the existence of any reality. Scientific men are therefore justified in refusing to say whether the material world did or did not begin to be, and limiting themselves to an investigation of the conditions of particular facts,

leaving the question of the ultimate explanation of reality to philosophy. The distinction of permanent and non-permanent causes is therefore irrelevant and misleading. Since every cause is on its particular side an event, no cause can be permanent; and as every cause on its universal side is a fixed relation or unchangeable fact, in whatever sense one cause is permanent all are permanent. The totality of causes is thus either the totality of events, or the totality of relations constituting these events, *i.e.*, the system of relations constituting nature as a whole. But what is the ultimate condition of there being such a system or whole we cannot tell without going beyond the conception of causality.

CHAPTER VI.

PHILOSOPHY OF NATURE (CONTINUED).

BIOLOGICAL SCIENCE.

WE have now dealt with two of the three philosophical problems that arise in regard to the knowledge of nature: we have inquired into the nature of mathematical and of physical knowledge, and we have found that in both cases alike knowledge rests upon the discovery of certain fixed relations implied in the very constitution of the world as known to us. Our next step is to ask whether our knowledge of nature is exhausted in the apprehension of mathematical and physical relations, or whether there are not certain facts which force us to employ a different conception of things. That there are such facts seems to be implied in the distinction between organic and inorganic beings, between living things and things without life. It is true that this distinction, which to common sense seems to be one of the most obvious and certain, has been denied, and that from two opposite points of view. According to one set of thinkers there is no absolute distinction between organic and inorganic beings, for all the facts of life can be explained in the same way

as we explain the changes which take place in the material world. If we adopt this view, obviously no conception but that of mechanical causation will be required. Another set of thinkers take exactly the opposite view, maintaining that, instead of saying that organic beings are in no way different in their nature from inorganic beings, we ought to say that inorganic beings are of the same nature as organic; in other words, though there seem to be objects which are entirely destitute of life, this is an illusion: all things are living, and nowhere in the whole world can there be found beings which are inorganic. It is therefore maintained that the conception of mechanical causation is not the only or the highest conception of the world. The distinction between these two sets of thinkers may be expressed by saying that the former "level down," and the latter "level up"; the one class reduce organic beings to the level of inorganic, the other class raise inorganic beings to the level of organic.

In the presence of such opposite views, it is obvious that we cannot *assume* the popular distinction between organic and inorganic beings, but must first deal with the preliminary question, whether such a distinction is justifiable at all. On the other hand, supposing it to be proved that the characteristic phenomena of living beings *cannot* be explained by the conception of mechanical causation, I do not think that we need encumber ourselves with the question, whether even those things which seem to be inorganic are not in reality organic.

Our problem, then, is this. Is there anything in the nature of those beings ordinarily distinguished as living or organic, which compels us to apply to them a conception different from that which we employ in our physical in-

vestigations; in other words, is there a *biological* as distinguished from a *physical* knowledge of nature? or is biology simply a branch of physics?

DEFINITION OF LIFE.

If we direct our attention to beings usually distinguished as living, can we state wherein their life consists? Mr. Spencer defines life as "the power of continuous adjustment of internal relations to external relations." This definition is so far true, that it emphasizes one aspect of the living being, viz., that it is perpetually going through changes which do not leave it unaltered, but involve new relations to its environment. Thus the living being in one point of view exhibits a great degree of instability. It is continually changing, and the more complex the being, the greater is the number of changes through which it passes in a given time. Mr. Spencer's definition, however, implies that the living being not only changes, but that there is a series of adjustments to new conditions. The relations of a stone to things external to itself are of a comparatively fixed and unchanging type, and seem to imply nothing more than mechanical and chemical relations. After the lapse of an indefinite time it displays the same essential features as at the first. It is otherwise with the living being, which not only exhibits relations to external circumstances, but presents continually new relations from moment to moment. So far therefore, we may regard Mr. Spencer's definition as true. But there is one aspect of life which it does not sufficiently accentuate. For not only does the living being display continual adjustment in its relations to the environment, changing as they change, but it preserves its unity through all the changes which it undergoes. External forces are

perpetually acting upon it, and threatening to destroy its unity, but so long as life continues the being recovers its unity. Thus a living being is a unity in a different sense from that in which we can speak of the unity of a stone. The unity of a stone consists in the fixed unchanging identity of the mechanical forces by which its parts are held together: the unity of the living being is an identity which maintains itself by continuous adaptation to external forces which it cannot avoid. In other words, life implies not only adjustment to external relations, but the persistence of unity or individuality. We may therefore define life as *the principle by which a being maintains its individuality by a continuous adaptation to external conditions.*

Now, the unity or individuality of a living being is dependent upon the organization of its parts. If we break up a stone into parts, each part retains the same properties as it had prior to the separation. A living being, or at least a living being which exhibits a definite organization, cannot be thus broken up into parts without losing its character as a living being. If a limb is severed from the body, it ceases to display the function which it possessed when it formed part of the body. Hence its function does not belong to it in its isolation from the other parts, but only in its relation to them. And this is true of every part of the living being; in fact, we determine what belongs to the individuality of the being by asking what is incapable of being severed from the whole without losing its characteristic function. A hand cannot grasp, an eye cannot see, an ear cannot hear, the lungs cannot breathe, the heart cannot beat, unless the hand, the eye, the ear, the lungs, the heart, form parts of one individual unity. It is not the mere juxta-

position of the parts which determines the unity of the living being, but a union so close and intimate that none can be what it is apart from its relation to all the rest. Now, this mutual dependence of parts as regards their functions is what we mean by organization. An organism is a union of parts, but the parts are what they are only in their relations to one another, and hence we say that each part is an organ of the whole.

That this conception of an organic unity is the basis of our distinction of a living from a non-living being may be seen from this, that where there is little differentiation of organs, we find it hard to say whether there is one being or several. The lowest form of animal is simply a mass of tissue, with no distinction of head and foot, digestive and nervous system. Such a being we regard as living at all mainly because it has the capacity of assimilating material, and loses this capacity when it dies. But though there is thus in it a certain unity of parts which coöperate in securing an end, the unity is of such an external character that a part will perform the same function as the whole. Such a being may be cut into parts, and the parts still have life. On the other hand, we find that the greater the division of labour between the parts, the closer is the relation by which the parts are bound together in the unity of the whole. Thus the differentiation of the organism is correlative to its integration. This principle is displayed even in beings which have a distinct nervous system. In lower animals, such as the frog, the spinal cord or the lower part of the brain is capable of discharging functions which in higher animals are devolved upon the higher part of the brain. Thus the more truly individual a being is, the

greater is the complexity of its organs, and the more highly specialized their functions.

There is another characteristic which distinguishes living beings from other objects: not only are they organized individuals, with the faculty of self-maintenance by adaptation to changing external conditions, but they produce other individuals of the same general type as themselves.

Now, if living beings have the power of adaptation to external conditions, and if they exhibit such an organization of parts as tends to their own maintenance, and the maintenance of their species, it seems as if we were forced to apply to them a different conception from that which was adequate so long as we were viewing the world from the purely physical point of view. For a being which not only passes through changes, but in all its changes realizes the end of self-preservation, cannot, it would seem, be properly understood without the conception of final cause. The conception of causality as employed in the physical sciences does not require us to say more than that there are certain fixed conditions under which all the changes in the world take place. The conception of final cause adds that, in the case of living beings at least, those fixed conditions are of such a nature that they are subservient to an end. Thus the conception of external causation tells us that under certain conditions there arises the sensation of light; the conception of final cause affirms that this sensation of light subserves the preservation of the sentient being for whom it exists. If this is so, we must widen our conception of the world by saying that it not only implies unchanging mathematical relations and unchanging physical relations, but also unchanging biological relations. In other words, not only

is the world a connected system, but it is an organic system. For, if the living being has the power of perpetuating itself by a continual adaptation to external conditions, these conditions must be of such a nature as to admit of such self-adaptation. The world must therefore be conceived as an organic whole, in which each part is related to all the other parts, *i.e.*, the world must be conceived from a teleological, and not from a mechanical point of view. Accordingly, the physical as well as the mathematical sciences must be regarded as true only in so far as they express what holds good of the world from their limited point of view. Just as there are no separate lines or figures in nature, so there can be no separate objects which are purely mechanical.

It may be said, however, and indeed it has been said, that, while the teleological view of the world has much plausibility so long as we suppose living beings to form separate and distinct species, this plausibility vanishes when we find that they have all originated in a purely natural and therefore mechanical way. In other words, it is maintained that the theory of development, as enunciated by Darwin, is incompatible with a teleological explanation of the world, and hence we must regard the conception of mechanical causation as the ultimate view of things. We must, therefore, ask whether the theory of development confirms, or casts doubt upon, the conclusions reached independently of it.

THE DARWINIAN THEORY.

As stated by Darwin himself, the theory of development assumes that there is a line of demarcation between organic and inorganic beings; and no attempt is made to derive

the former from the latter. What Darwin maintained in his *Origin of Species* was, that all living beings have been derived from "one or more primordial forms"; but these "primordial forms" he regarded as themselves living. What Darwin denied was the older biological doctrine that certain animals are clearly distinguishable by peculiarities of form, size, colour, etc., and produce offspring that closely resemble their parents, these peculiarities being permanent. Thus, the *rook* and the *crow* were regarded as distinct species, because (1) they differ from each other in structure, form, and habits, and because (2) rooks always produce rooks, and crows crows, and they do not interbreed. It was therefore supposed that all existing crows were descended from a single pair of crows, and all the rooks from a single pair of rooks. How the primitive pairs were formed was a "mystery."

In opposition to this view, Darwin maintains that "species are not immutable, but that those belonging to what are called the same genera (*e.g.*, the crow and the rook) are lineal descendants of some other and generally extinct species, in the same manner as the acknowledged varieties of any one species are the descendants of that species." There are two fundamental principles which explain how species have originated. In the first place, all living beings multiply in a geometrical progression. In the second place, the offspring differ slightly from the parents, though generally they closely resemble them.

(1) Now, it is impossible that all the beings born into the world should live, because there would not be sufficient food to sustain them. Hence arises a struggle for existence, resulting in the extinction, on an average, of as many as survive. They kill one another, they starve

one another, and the forces of nature carry many of them off. Which of them survive? Naturally, those that are stronger, or swifter, or hardier, or more cunning. "The fittest always survive"—not necessarily the strongest, but those which have some peculiarity that enables them to escape destruction.

(2) There is also another principle at work, the principle of heredity or transmission of variations. In the case of plants or domestic animals, we can improve the stock by carefully selecting the best seed and the finest animals. After a time they may have so improved that it is hard to recognize them as identical with the primitive stock. So, in a state of nature, the beings that have some peculiarity that gives them a superiority in the struggle for existence, survive; but when this variation is no longer useful, those individuals that chance to have a new quality or modification more favourable to their continuance will gradually displace the old. It is in this way that new species originate. The general conclusion reached by such considerations is, that all plants and animals have been gradually evolved from "one or more primordial forms."

This doctrine, however, is applied not only to plants and the lower animals, but to man. The most superficial examination of man's body shows that it agrees in all essential features with the bodies of other mammalia. "Every detail of structure which is common to the mammalia as a class is found also in man, while he only differs from them in such ways and degrees as the various species or groups of mammals differ from one another." Now, if it is reasonable to conclude that all mammalia originally descended from some primitive type, are we not compelled

to suppose that man also must trace his origin back to that type?

Granting that man has originated in the same way as other living beings; granting, in other words, that as an animal he must be classed with other animals: the question arises whether his mental and moral faculties have also been derived by gradual modification and development from the lower animals. Now, in his *Descent of Man*, Darwin does not say in express terms that the spiritual nature of man has been derived from the lower animals, "in the same manner and by the action of the same gen laws as his physical structure"; but the whole of his argument tends to that conclusion.

"The rudiments of most, if not all the mental and moral faculties of man can be detected in some animals. They exhibit curiosity, imitation, attention, wonder, and memory; they display kindness to their fellows, pride, contempt, and shame." Some are held to possess a rudimentary language, because they utter several different sounds, each of which has a definite meaning to their fellows or to their young; others possess the rudiments of arithmetic, because they seem to count and remember up to three, four, or even five. They seem to have some sense of beauty, and certain animals are said to have imagination, because they appear to be disturbed by dreams. Even an approach to religion is said to be exhibited in the deep love and complete submission of a dog to his master.

Again, if we compare the lowest races of man with the higher animals, we find that the mental and moral qualities of the former are very little higher than those of the latter. In the lowest savages there is not a distinct moral sense, but merely certain social instincts

which develop through circumstances into a moral sense. Those actions which are regarded as contrary to the interests of the tribe excite its disapprobation and are held to be immoral; those actions which as a rule are beneficial to the tribe meet with its approval, and are considered moral. Naturally, the individual has a feeling of satisfaction when he acts so as to gain general approbation, and of discomfort when he does anything contrary to the mind of his tribe. In these feelings originates his consciousness of right and wrong. Conscience arises from the struggle between the desire to do what will benefit oneself and injure others, and the desire to obtain the general approbation of the tribe. The social instincts are thus the foundation of morality.

Now, you will observe that in this argument two things are implied: firstly, that there has been a continuous development of intellectual and moral faculties, from the lower animals up to savages, and from savages up to civilized man; and secondly, that this development may be explained by the same law of natural evolution that has been employed to account for the natural descent of man from lower forms of being. It will therefore be well to point out clearly the distinction between these two things. Let us ask, therefore, What is the precise nature and value of the proof that man has descended from the lower animals, granting that proof to be as irresistible as scientific men usually suppose it to be?

I do not propose to inquire into the evidence brought forward by Darwin and his followers in support of the natural descent by inheritance of all living beings from one or more primitive forms. Even if I were competent to give an authoritative opinion on that question,

it would not be my place to do it. I shall therefore assume, with the majority of scientific men, that as a matter of fact the old doctrine of the immutability of species is false, and that in the principle of natural evolution we have found the true explanation of the phenomena of organized existence. In other words, we must, in my opinion, be prepared to accept the extension of natural law to living beings. On this view, natural evolution is in the organic world very much what gravitation is in the sphere of the inorganic. What I wish you to consider is, whether, accepting the theory of development as the only tenable explanation of the characteristics and changes of living beings, we have reached an ultimate explanation, or whether we have only solved a subordinate problem.

DARWIN AND PALEY.

Now there can be no doubt that the principle of natural evolution, as conceived by biologists, is inconsistent with the conception that any organ or organism has been specially constructed with the design of performing a particular function. Paley, in his celebrated argument from design, compares the various organs of a living being to the parts of a watch. Just as the watch is put together by the watchmaker so as to fulfil the purpose of showing the time, so the organs of a living being have been constructed by the supreme Artificer in order to secure its existence and well-being. The same adaptation of means to ends is exhibited, he argues, in such an organ as the eye, which has been constructed with the express purpose of enabling the individual to see. This argument therefore rests upon the idea that the

organs of living beings have been specially designed to subserve a particular purpose. Now, this conception of design is not consistent with the doctrine of natural evolution. It assumes that the peculiar adjustment of organisms and organs to external conditions cannot be explained without recourse being had to the hypothesis of an artificer external to them, who specially adapted them to their environment. It assumes, in other words, that in the ordinary operation of natural law there is nothing to account for the peculiar character of living beings. For the whole force of the argument lies in this, that there is nothing in the nature of living beings themselves, or in the action of circumstances upon them, to explain the wonderful adjustment of the one to the other. It is *because* the operation of natural law does not explain the adaptation of an organism to its environment that recourse is had to the conception of an external designer. Just as the parts of a watch would never come together as they are found in the watch, unless they were brought together and arranged by the watch-maker: so the organs of a living being would never come together spontaneously without the special interposition of a designing intelligence external to them. But this is exactly what Darwin denies. He refuses indeed to say how the primitive forms from which living beings have descended came to be in existence—whether by "special creation" or by evolution from non-living things—but, in regard to the adaptation of all subsequent beings to external conditions, he maintains that the operation of the law of natural evolution explains the facts quite irrespective of any hypothesis of special design. A teleologist like Paley would say that an organism

exists because it was made for the conditions in which it is found; the Darwinian, that "an organism exists because, out of many of its kind, it is the only one which has been able to persist in the conditions in which it is found."[1] The ordinary teleologist would say that cats have been made *in order* to catch mice; the Darwinian, that cats exist *because* they catch mice well.

The effect of the Darwinian theory therefore is to exclude from the realm of science all explanation by final causes, and to bring the organic world like the inorganic, under the sway of inviolable law. Nor can there be any doubt that in this procedure it is simply following in the lines of the other sciences, which have discarded the hypothesis of the special interposition of supernatural agency, and have sought only to find out the fixed laws according to which phenomena occur.

Darwinism, then, seeks to show, firstly, that each living being is fitted for some external conditions, not because it has been externally and artificially constructed for the purpose of living under those conditions, but because it would not have existed at all had it not possessed naturally the organs essential to such existence. Secondly, it explains the existence of all the varieties of living beings, and more particularly the "wonderful development of the highest, by means of the action and reaction between the environment and the simplest organic forms."

I do not think that any fruitful results in philosophy are to be obtained by attempting to reinstate the conception of external design. Our problem rather is this: granting that the Darwinian theory has made it impossible for us any longer to hold to the idea of the external

[1] Huxley's *Lay Sermons*, p. 302.

and artificial adaptation of an organized being to a particular end, must we not seek for a new and higher conception of the relation of the various parts of the universe to one another, and more particularly of the various organized beings to their environment? This is, in fact, the special problem of philosophy as distinguished from science. Science is content to start from the assumed independent existence of individual objects, and to treat them as if they were only externally related to one another. This assumption, however, philosophy cannot allow to pass without criticism, but goes on to ask whether there is not a principle of unity which explains the differences of things by showing that they all belong to one intelligible system.

In examining the view of Comte, that knowledge is limited to particulars, I tried to show that such a doctrine is inconsistent with the nature of knowable existence. All things that can be observed are related to one another by the fact that they exist in space. We can therefore say, that no sensible object can possibly be known that does not fall within the one world of space. The question therefore arises, whether we are not compelled to hold that all living beings in like manner belong to a single system of things, and whether, therefore, we are not forced to return to a teleological conception of the world if we are to bring the theory of development into harmony with the rest of our knowledge.

I shall begin by pointing out some of the presuppositions with which the theory starts; and I shall then inquire whether those presuppositions do not take us beyond the theory, and compel us to regard the universe from a teleological point of view.

In the first place, the theory assumes that the laws of inorganic nature are inviolable. The environment, to which living beings must conform on pain of extinction, involves all the ordinary laws of dynamics, physics, and chemistry. Now, these laws rest upon such principles as the indestructibility of matter, the equality of action and reaction, the affinity of elements for each other. The first of these principles affirms that, whatever may be the changes in the sensible properties of things, the quantity of their matter is unchangeable. When a piece of wood is burned, it changes in its sensible properties, but its *weight* remains the same. So if one body impinges upon another, both alter their position, but the total quantity of energy is the same. Two chemical elements will combine only if they have an affinity for each other, and this affinity is not a mere accident but belongs to the very constitution of the elements.

Secondly, the Darwinian theory assumes that in each living being there is a tendency or impulse to maintain itself, and to continue its species. This is implied in the "struggle for existence," which is the main principle of the whole doctrine. Unless living beings possessed the impulse towards self-maintenance, and the impulse to continue their species, there would be no struggle for existence. In the very nature of living beings, there is therefore implied a purposive tendency. It is true that the impulse can only be realized under appropriate external conditions, but external conditions themselves will not account for the facts unless we also presuppose the tendency to self-maintenance and race-maintenance.

Thirdly, the theory also assumes that the variations in the several parts of the living being are consistent

with the impulse to self-maintenance and race-maintenance. For however strong that impulse might be, it would be powerless unless the being by inheritance possessed the organs enabling it to maintain itself under the external conditions in which it is placed.

These three assumptions, then, are clearly implied in the doctrine of evolution. If the laws of inorganic nature were not constant, there could be no continuous development of living beings. If living beings had no impulse to self-maintenance, there would be no struggle to live under given external conditions. And, lastly, if there were no law of inheritance by which offspring resembled their parents and yet varied slightly from them, there would be no development of organisms exhibiting an ever more perfect correlation of parts. Now, I think it may be shown that these assumptions, when we ask what is implied in them, compel us to hold that the world is a system, or, in other words, that we cannot explain existence apart from some form of teleology.

It is virtually assumed by Darwin that a denial of teleology in the sense in which Paley affirmed it is the same thing as a denial of teleology in any sense. This, however, does not seem to me to follow. On the contrary, the more clearly we see that no species of living being has been directly formed for a special set of circumstances, the more manifest it becomes that between the inorganic and the organic world there is so close a connection that the one cannot exist without the other. No doubt, if we look at a particular set of circumstances and a particular species of living being, there seems to be no connection except a purely accidental one. Plants that happen to be well armed with spines or hairs may

escape being devoured; a much stronger plant without this accidental advantage may perish. If the one species was constructed with hairs to escape destruction, shall we not have to say that in the construction of the other species there was a failure in foresight? At first sight it therefore seems as if there were no adaptation between the environment and the organism except what is accidental. If an organism happens to possess a peculiarity that gives it an advantage in the struggle for existence it survives, if not it dies; but the law of inheritance by which the advantageous peculiarity arises seems to have no necessary relation to external conditions, but to be purely accidental. But, when we look more closely, we shall find, I think, that the connection between the organism and the environment cannot be called accidental.

For (1) if there were no harmony whatever between an organism and its environment, the organism could not exist at all. Before a being can live, there must be a certain adjustment of the external conditions to the internal; death, in fact, arises when that adjustment is no longer possible. Even in the case of the beings that do not survive, there is necessarily a certain degree of harmony between them and the conditions in which they are found. The struggle for existence is a struggle to maintain the initial harmony. But, because in some organisms the capacity of adaptation to given conditions is made possible by a peculiar feature not found in others, the harmony of organism and environment is maintained and the being lives and grows. To suppose, therefore, that there is no harmony between living beings and external conditions is to suppose that life is impossible; in other words, it is to contradict the fact from which the

development theory starts. The relation between the inorganic and the organic world is therefore not an accidental relation, but one that is implied in the very existence of the organic world.

Now, if this is true, we can no longer oppose the organic to the inorganic world as if they were two independent spheres of existence, only externally and accidentally connected; we must, on the contrary, regard them as belonging to one system of things. It is not a matter of chance that some living beings are incapable of continuous adjustment to the external conditions, and others succeed in effecting an adjustment: it is a matter of necessity. Were the external conditions totally different from what they are, living beings could not exist: that they do exist is sufficient evidence of an essential harmony between them and the conditions of their existence. What the development theory really proves is, not that the relation of organized beings to their environment is a purely accidental one, but that the adjustment is in the case of many living beings imperfect, and ultimately in all.

(2) We have seen that the theory implies in each living being an impulse to maintain itself. If this were absent there would be no struggle for existence. Hence we cannot regard the relation of organic beings to the environment as the *mere* action of the environment on the organism, but we must add that the tendency to self-maintenance and to race-maintenance is an essential factor in the case. That is to say, living beings are unconsciously purposive in this sense, that their very existence implies a tendency to continue their own existence and the existence of their species. It is true that

this tendency is in many individuals never realized, on account of an imperfect relation between the organism and the environment; but it is not less true, that while the individual is sacrificed, the tendency to self-maintenance is actually realized on the whole. Thus, while the world is not fitted for the realization of the impulse to self-maintenance in every individual, it is fitted for the existence and perpetuation of life on the whole. We can no longer hold that each living being, or even each species, has been specially constructed with a view to its existence under certain definite external conditions; but we can say, that between organic and inorganic things as a whole there is a necessary harmony. This becomes even clearer if we consider—

(3) That living beings have not only a tendency to self-maintenance, but a tendency to organization. This tendency to organization is explained by Darwin as due to the fact that each organism reproduces itself with slight variations in its offspring, and that those living beings which possess a variation harmonious with the external conditions of existence survive, and, reproducing their type with a new variation, give rise to a form of being having a still more perfect capacity of adjustment to the environment. Now, it is true that this mode of explanation is inconsistent with the idea of an external construction of a certain type of organism out of a preëxistent material; for, in the living being itself is found the variation which accounts for its adaptation to the environment. But this only shifts the problem, and forces us to ask what is meant by this hereditary tendency to variation. If there were no such tendency, there would be no possibility development, since that tendency is essential to the

existence of certain forms, and to the gradual development of higher forms. While, therefore, the relation of organism and environment is incompatible with the perpetuation of certain forms, it is compatible with others. But what is still more important, it is the very incompatibility of lower forms with the conditions of existence that explains the development of higher forms. If the simplest and lowest forms of life were better adapted to the environment than the more complex and higher forms, there could have been no evolution of the higher out of the lower. It is just because some beings are less adapted to the environment than others that a perpetual development of higher forms has taken place. The environment, in other words, is opposed to the continued existence of lower forms of being and harmonious with the continued existence of higher forms.

Thus the idea of purpose comes back in another and higher form. It is now seen to be implied in the very nature of existence, not to be something external and arbitrary. The organic forms with the inorganic world a systematic unity in which every part is related to every other. We find, in fact, in the evolution of living beings, the same unifying principle that is at work in the inorganic world, only that in the former the tendency to unity is more clearly manifested than in the latter. The parts of a stone, *e.g.*, seem to be only externally related to one another. Break it up and there is in the stone no tendency to a restoration of the unity that has been destroyed. In the living being, on the contrary, there is a perpetual conflict with external forces, resulting, as we have seen, in the development of ever higher forms of life. Hence it is that, in life, as Kant said, the idea

of purpose first clearly presents itself. Apart from the tendency to organization and unity, there is no life; and this tendency, in its widest sweep, is exhibited in the gradual ascent of life from its simplest to its most complex forms. The higher a being is, the greater is its power of adaptation, and the more perfect its unity.

CHAPTER VII.

RELATIONS OF BIOLOGY AND PHILOSOPHY.

We find, therefore, that, when it is interpreted from the philosophical point of view, the theory of development leads to the conclusion that organized existence exhibits the continual evolution of living beings towards a more and more perfect form of unity; in other words, it implies that the form of existence is necessarily ruled by the idea of unity, and is a realization of unity. And this is the same as saying that the world is in no sense a product of chance or of external necessity, but must be conceived from the point of view of immanent teleology.

I am well aware that many objections may be raised to this conclusion, and these we shall afterwards have to consider. At present my aim merely is to indicate in general the point of view from which, as I think, the question must be regarded. Assuming, then, that the world is in no sense given over to chance, or, in other words, that it constitutes a systematic unity in which every element is striving towards a definite end, we have next to ask what is the ultimate nature of this unity; we have to ask, in other words, whether the unity of the world implies or does not imply intelligence. It is

one thing to say that the world is a unity and exhibits in its changes a continual tendency towards a more perfect unity, and it is another thing to say that this unity and tendency to perfection necessarily implies intelligence. It may even be plausibly argued, that as the teleological conception of existence implies absolute fixity in the relations of things, or, in other words, the reign of inviolable law, there is no necessity for the hypothesis of intelligence at all. This is the question which lies at the basis of all philosophy, and we must give our best efforts towards its solution. The only satisfactory answer will consist in the whole system of philosophy, but some preliminary idea of it may be given now.

We have seen that Darwin not only traces the physical descent of man down from some primitive form of living being, but he seems to find in the principle of natural evolution a sufficient explanation even of his intellectual and moral qualities. The whole tenor of his thought in the *Descent of Man* is that the great gulf supposed to be fixed between man and the animals cannot be shown to exist. If, therefore, we can explain all the characteristics of the animals by the principle of natural evolution, why should we not also explain in the same way all the characteristics of man? Here, then, two main propositions are asserted or implied by Darwin: first, that man as regards mental qualities differs from the animals only in *degree*, not in kind; second, that the mental qualities of both man and the animals may be accounted for by the law of natural evolution. Can these two propositions be maintained?

Now, it is asserted or implied that the mental qualities of man are generically identical with those of the animals.

Darwin brings man and the animals closer together, first, by lifting up the animals, and, second, by lowering man.

(*a*) The higher animals, he contends, exhibit the same *kind* of intelligence as man. They display, *e.g.*, curiosity, wonder, memory, imagination; some possess a rudimentary mathematics, language, aesthetics, morality, and religion. We must, therefore, correct our preconception that the animals are destitute of intelligence. The facts show that they possess in an elementary form all that has hitherto been supposed to be distinctive of man.

(*b*) On the other hand, we must recognize that man in his lowest stage of development is very little superior in mental qualities to the most developed of the animals. The savage has social instincts which bind him to his fellows, but the same instincts are exhibited by the higher animals. The difference between the highest animal and the savage is no greater, if even so great, as that between the savage and the civilized man. Now, the difference between the civilized man and the savage is only one of degree, and, by parity of reasoning, the difference between the higher animals and the savage must also be one of degree.

The general conclusion, then, would seem to be that in the animals is found the same kind of intelligence as in man, just as their organism differs from man's only in its being less developed. There is no break in the continuity of development: the high intelligence of civilized man has come out of the low intelligence of the savage, as the latter has been evolved from the still lower intelligence of the animals. Man used to be defined as a "rational animal," and it was supposed that "rationality" differentiated him from the lower animals. This definition

we must now extend to other beings besides man, and we must say that "all animals are rational."

Now, it is not my intention to dispute the facts upon which Darwin bases his view of the essential identity in mental as in bodily powers of man and the animals. There can, I think, be no doubt that the higher animals exhibit qualities that must be regarded as implying an elementary intelligence. Granting this, I propose to show that we must carry back this principle further than Darwin has done. If, in the animals nearest to man, we find traces of a rudimentary intelligence, must we not expect to find in less developed animals traces of an intelligence still more rudimentary; nay, must we not hold that even plants exhibit intelligence in a still more rudimentary form? Nor does it seem possible to stop here. Following out the same line of thought, must we not go still further back, and look for inchoate intelligence even in inorganic things? This is the direction in which many men of science have recently gone. It is a revival, in a new form, of a doctrine that was advanced in his day by Leibnitz. Perhaps, therefore, it may help to clear the way, if we first consider the Leibnitzian theory of the essential identity of all forms of existence.

THE MONADS OF LEIBNITZ.

Every real thing is held by Leibnitz to be an individual substance, or, in other words, to have a unique existence of its own, separating it from all other existences. From this point of view, the universe is made up of an infinite number of distinct individuals, which, like crystal spheres, are exclusive of one another and mutually repellent. The universe is therefore a *collection* of separate individuals,

not an organic unity, in which each individual is only ideally separable. "There can be nothing real or substantial in the collection, unless the units be substantial." Each is a little world of its own, developing by itself, "as if there were nothing else in existence."

This, however, is only one side of the Leibnitzian doctrine. Pushed to its logical extreme it would dissolve the universe into fragments. Each "monad," as Leibnitz calls the individual, is in its existence unrelated to every other. There is no really *continuous* existence, but only *discrete* existence. Leibnitz naturally had some difficulty in satisfying himself that material things are separate and distinct. For every material thing is in space, and as such it seems to be infinitely divisible. How then shall we reach an absolute individual, an ultimate atom? If the supposed ultimate atom occupies space, it must be divisible, and therefore it cannot be a real individual. To obtain a real individual atom, it would seem as if we required a space that was itself made up of separate parts, and of such a space we can form no conception whatever. Leibnitz gets over this difficulty by boldly denying that space has a real existence, and consequently by denying that material things are really extended.

The ancient Atomists, he says, made the mistake of supposing that there are real material atoms existing in space; and hence they were forced to hold the self-contradictory doctrine that there are real material atoms which have no parts. Real units, then, are not extended at all; they are individual "monads" having an independent existence, but not an existence in space. The idea of space is a "confused idea," *i.e.*, an idea resting

upon the first or apparent view of things. At the stage of sensible perception it *seems* as if real things were in space and were extended; but, when we reflect on the nature of reality, and bring our knowledge to the clearness of thought, we see that real things are not in space. The same thing is true of time: there is no real time, nor are real existences in time. Yet the external world is not a mere illusion: it has its own definite laws, and, what is more, there is a perfect correspondence between the real relations of "monads" to one another, and the connection of phenomena in time and space. The law of phenomena is different from the law of real things. Phenomena are connected by the law of *efficient* causes, monads by the law of *final* causes. The monads are determined by their own inner nature, not by the action upon them of external causes, but there is a *correspondence* between the connection of phenomena and the self-determination of monads. The reason of this correspondence is that the activities of the real monads are refracted in passing through the medium of sense; only this refraction always takes place in a fixed way. For example, if I will to raise my arm, the volition proceeds entirely from me: I am self-determined. But, on the other hand, the movement of the arm seems to be sufficiently explained by the cerebral movement, which itself is excited by sense-perception. I am myself the real cause of the action, but from the point of view of perception the cause is a bodily movement.

But why, it may be asked, are monads compelled to represent things in the "confused" form of perception? If perception is an inadequate view of things, can it be

said that the monads are determined purely from themselves? A monad that represented reality as it is would always view things from the point of view of thought; and hence for it there would be no space or time, no extended or temporal world, no efficient causes. In attempting to meet this difficulty, Leibnitz is forced to modify his first unqualified assertion of the absolute self-determination of the monads. All finite monads are indeed determined from within, but each has a certain limit in its own nature to its activity. It is because of this limit that it does not represent the universe to itself as it truly is, but always in a more or less confused form. It presents to itself a picture of the whole world, but a picture blurred and indistinct. But all monads do not represent the world with equal clearness. There is a regular gradation. God, the "monad of monads," whose activity is absolutely unlimited by any passive element, apprehends all things in the clearness of pure thought. Finite spirits like men apprehend the world partly in the light of thought, partly in the confusion of sense. Animals have only sense perception, while plants and inorganic things represent the world in a still more confused way. Observe, however, that on Leibnitz' view the distinction between man and the animal, between the animal and the plant, and between the plant and the mineral, is one of degree not of kind. Wherever there is existence, there is perception. Every monad is an individual, and there is no individual that has not an ideal centre of perception, in which it represents all other existence. It is a "living mirror gifted with an internal activity, whereby it represents the whole universe according to its particular point of view,

and in such a way that its ideal universe has all the regularity of the real one."

In this doctrine of Leibnitz we have a suggestion of the manner in which the Darwinian conception of the distinction between the animals and man must be completed. As the animals differ from man only in the degree of their mental qualities, so we must suppose the plant and the mineral to differ in a similar way. This view has been put forward, though with some hesitation, by Tyndall, and Haeckel adopts it without any hesitation. It is pointed out by Tyndall that in the tendency to crystallization of the mineral world we have an anticipation of the organized form of living beings. The whole tendency therefore of the Darwinian conception is to deny that there is any fundamental distinction between different orders of existence. The mineral exhibits in an implicit form the same characteristics as are presented in man in an explicit form. We can therefore readily understand why Tyndall says that in matter he discerns the "promise and potency of all kinds and qualities of life." As Darwin denies any generic distinction between man and the animals, so Tyndall would deny any generic distinction between man and the mineral. And the same line of argument is applied by both. As Darwin seeks to show that the higher animals come much nearer to man than is commonly supposed, so Tyndall maintains that in the wonderful symmetry of the crystal we have a close approximation to organized existence. The inference would therefore seem to be, that there is no break in the continuity of existence, but all existence is of the same fundamental nature.

If we examine this conception closely, I think we shall find that it really involves two radically different views of the world, which have not been clearly distinguished from each other. The first view is, that there is nothing in the nature of intelligence as found in man that is not contained in lower forms of existence; in other words, it is implied that intelligence must be reduced to the same level as other modes of existence. The second view is, that all forms of existence imply intelligence, since even in the mineral we find implicitly what in man we find explicitly. The first view levels down, the second levels up. It is one thing to say that all the characteristics of man as an intelligent being can be explained by the operation of the same laws as those which account for the form and movements of inorganic things, and another thing to say that the laws of inorganic nature properly understood are really laws of intelligence. We must therefore inquire which of these opposite views is really held by men like Darwin and Tyndall, and which is true.

Now, I think there can be no doubt that the tendency of Darwin's theory of the nature of man is to abolish the distinction between intelligence and non-intelligence, though it is rather certain of his followers than Darwin himself who hold that the mental and moral qualities of man may be explained on the principle of natural evolution alone. I think that this extreme view may readily be shown to be untenable.

The evolution of all forms of life, as we must suppose, has taken place in this way, that the advantageous peculiarities received by inheritance enable certain forms to survive. But these peculiarities simply come to the indi-

vidual by natural inheritance. No living being can change its inherited qualities. The external conditions are in like manner beyond the control of the individual. Now, whether an individual will survive or not depends upon its power of adaptation to the environment, and this depends entirely upon the natural adaptation of its inherited peculiarities to the circumstances in which it is placed; hence there seems to be, on this view, no place for any spontaneous activity on the part of the individual living being. If therefore, we apply the doctrine of natural selection to man, it seems to make any claim for his freedom, either of intelligence or of action, quite unintelligible. Man, we are to suppose, inherited from his animal progenitors such qualities as curiosity, wonder, memory, imagination. But these are purely natural tendencies which the individual can neither make nor unmake; they come to him by inheritance, like his bodily powers, and their direction is determined by the external conditions in which he is placed. Thus the curiosity of primitive man we may suppose to have been excited by something he could not explain, but the feeling itself was due to an inherited tendency, and was called out by the external circumstances. If, therefore, we follow the evolution of man from his primitive to his civilized condition, we shall still find nothing but the reaction of the individual on his environment,—a reaction determined simply by the peculiarities of his inherited disposition.

(*a*) There is on this view no more room for any free activity in knowledge on the part of man than on the part of an unconscious thing. Hydrogen exhibits by its natural constitution an affinity for oxygen. but it would

be regarded as a pure fiction to endow the hydrogen with any capacity of freely selecting the oxygen as its mate. For, it would be said, hydrogen cannot *refuse* to unite with oxygen under certain conditions: the union is absolutely determined by the natural characteristics of both. In the same way it must be denied that in man there is any freedom in knowledge; he can know only that which his inherited disposition fits him to know: to suppose that he could have a different disposition, or react differently under the conditions, is incompatible with the principle of natural evolution.

(*b*) Nor can there be any freedom of action. Primitive man inherited certain tendencies from his animal ancestors. Thus, like them, he has a selfish tendency and a social tendency. Which of these shall be predominant will be determined by the interaction between the organism and the environment. The moral sense is developed by the conditions under which man is placed. In virtue of his love of approbation and his fear of punishment—both inherited peculiarities—the savage comes to have a feeling of pain when he follows the selfish desire for his own pleasure. Right and wrong are therefore names for the pleasure of approbation and the pain of disapprobation respectively. But the individual man can no more determine which of these shall predominate than he can alter his bodily stature or endow himself with new senses. We must suppose that in the majority of men the love of social approbation is stronger than the love of individual pleasure; because, otherwise, the extension and development of the social bond would be impossible. But this only shows that the inherited disposition and the environment tend on the whole to the evolution of higher

sociality: it does not show that in the individual there is any free activity.

Thus the theory of natural evolution, when it is employed to account for the mental and moral qualities of man, leads to the conclusion that there is no freedom either of knowledge or of action. Now, when we clearly see the results which follow from a rigid adherence to the doctrine of natural evolution, we cannot help asking whether a grave mistake has not been made in attempting to explain intelligence and morality by a principle which necessarily excludes all freedom either in knowing or in willing. May it not be that natural evolution is only a limited or partial explanation, true within its own sphere, but inadequate and untrue when extended to the explanation of conscious beings?

In attempting to answer this question, I must begin by reminding you that the theory in question brings man nearer to the higher animals, and the higher animals nearer to man. For it is held that in the higher animals are to be found the same characteristics as in man, and that the savage possesses these characteristics in a degree only a little superior to the higher animals. Now, in this contention, it is implied that mental and moral qualities are purely *natural* characteristics, received by inheritance, and called out by the reaction of the organism on the environment. It is assumed, in other words, that the qualities of the animals are the product of natural evolution, and, as it is held that there is no essential difference between man and the animals in respect of those qualities, it follows that the intelligence of man can be explained in the same way. That is to say, the fact that the higher animals possess qualities similar

to man's is not regarded as a reason for doubting whether natural evolution is an adequate explanation even of them; but it is inferred that, as the explanation is adequate when applied to the animals, it must also be adequate when applied to man. I propose to approach the problem from the other side, and to ask whether the principle of natural evolution is adequate to the explanation of the facts of intelligence and morality as these exist in man. If we see reason to deny its adequacy as regards man, we shall have reason to doubt whether it is adequate even when applied to the animals.

DOES NATURAL EVOLUTION EXPLAIN KNOWLEDGE?

Let us first ask whether natural evolution explains the fact of knowledge as it exists in man.

We are told that man inherited from his non-human ancestors such mental characteristics as curiosity, wonder, and memory. What is curiosity? It implies an *interest* in some object, and a concentration of *attention* upon it for the purpose of discovering what are its properties. It is further implied in curiosity that the subject believes in the intelligibility of the object. Now interest, attention, belief in the intelligibility of the object, all involve the faculty of distinguishing one object from another by an apprehension of the properties of each; and this again implies that the apprehending subject is capable of separating between himself and the immediate impression that he has from moment to moment. For if, as each impression arose, it vanished for ever, it would be impossible for the subject to distinguish one impression from another, and therefore impossible for him to identify an object

by its peculiar properties. Primitive man was no doubt engaged mainly in a fierce fight for existence, a fight to preserve himself from the destructive influence of the elements and from his natural foes, the lower animals. It was therefore necessary for him to learn to some extent the properties of the elements and the habits of the lower animals. To do this he had to discriminate things by their properties; to learn the nature of fire, tempest, cold, sunshine, and to find out how the animals might be overcome or captured. But the victory over objects he could achieve only if he had the faculty of grasping the different properties of things. To this end all his energies were directed, and if he made a serious mistake, the forfeit was his life. He had therefore to free himself from the first impressions of the nature of things, by attention, comparison, and discrimination; that is, he had to separate between his impression of things and their actual nature. Such a faculty of distinguishing between the apparent and the real is the pre-requisite of all knowledge; and it implies that man was not the sport of the fleeting impression of the moment, but was in some sense its master. His curiosity took the form of an interest in all those properties of things, a comprehension of which was essential to his very existence. Primitive man had no scientific interest in nature; he did not study its phenomena with a view to understanding it for itself. Yet we can readily see in the undeveloped and limited curiosity which he possessed the rudiments of the scientific curiosity of civilized man. For, as I have said, he assumed that what he sought to understand was capable of being understood. That is to say, he assumed that in his own intelligence could be found the key to the interpretation of

things. Knowledge, then, even as it existed for primitive man implied (1) the consciousness of a distinction between the apparent and the real, and (2) the capacity of apprehending the real in virtue of intelligence.

It is plain, then, that any attempt to reduce knowledge to the mere flow of impressions in a subject that passively receives them, makes even the simplest knowledge unintelligible. If consciousness could be described as a mere series of occurrences in the subject, there could be no knowledge. The successive positions taken up by a moving body may perhaps be so described, but the consciousness of man refuses to be expressed in such terms. The moving body is not aware of the successive positions it occupies: man not only has impressions, but he is aware that he has them. To the conscious subject we must therefore attribute much greater complexity than to the unconscious thing. Consciousness always involves the opposition of what seems and what is; or, what is the same thing, it implies that impressions as they occur are only the sign or index of what does not occur. Consciousness also involves the capacity on the part of the subject of contrasting the stream of occurrences with the permanent nature of the object. It presupposes, in other words, that the objective world is not a mere series of occurrences, but a fixed system of things, and that the subject is capable of finding out what that system is. Knowledge always consists in grasping things from a universal point of view, *i.e.*, in liberation from accidental impressions and associations. This is the real force of Bacon's contention, that man must come to the study of nature free from all preconceptions. For what this implies is, that only in freeing oneself from the accidental

impressions of the moment, and putting oneself at the point of view of existence as it actually is, can knowledge be obtained.

THE CARTESIAN CONCEPTION OF MIND.

What has just been said may also be put in this way, that no knowledge is derivable from mere impressions, but only from impressions that have been brought to the unity of conception. For it is by conception, *i.e.*, by the mental apprehension of the meaning of individual impressions when these are viewed by reference to the whole system of things, that we obtain knowledge. We must be careful to observe, however, that we cannot absolutely oppose the conceptions of our own minds to the actual nature of things. Descartes, *e.g.*, maintained that there are certain "innate conceptions," which belong to the mind as it is in itself, while, on the other hand, our particular experiences come to us from without. But if we suppose the mind to supply conceptions purely out of itself, what guarantee can we have that these express the real nature of existence? This whole mode of thought rests upon the supposition, that knowledge is partly obtained by the mind's contemplation of itself, and partly by the mind's passive apprehension of what is without itself. Now, this involves a double misapprehension. In the first place, the mind has no nature when it is separated from all objects actual or possible; and, in the second place, there is no apprehension by the mind of what is without it.

(1) Suppose the mind to be absolutely separated from all objects, and it has no conceivable nature. If we try to think of such a mind, we can only describe it by

negations: we can say, that it is *not* extended or movable or ponderable: in short, that it has none of the predicates by which we may describe the material world. This was clearly enough perceived by Descartes; and therefore he went on to say, that mind has none of the attributes of matter, but must be defined as a purely thinking substance. It may be shown, however, that mind in complete isolation from matter cannot be defined even as a thinking substance. For *about what* is it to think? It cannot be a mind which *perceives*, because perception is of a world of objects whose properties are those of extension, motion, weight, etc., and, by hypothesis, the mind in itself is a substance that has none of these properties and is entirely removed from all contact with them. And if it cannot perceive, neither can the mind *remember* or *imagine*; for remembrance and imagination presuppose perception. I cannot remember what I have never perceived, nor can I imagine anything that is not a re-arrangement of what has been perceived.

In this difficulty Descartes falls back upon the view that there are certain conceptions which the mind has by its very nature,—such conceptions as that of God. But the conception of God or the Infinite is not possible apart from the conception of the Finite. If we think of God we must think of Him as the Being who is the source of all existence, and that is impossible if we have no consciousness of any existence. Shall we then say, that although the mind has no conception of any object—whether that object is the world or God—it yet has a conception of itself as a pure thinking activity? But a pure thinking activity which thinks nothing is just as inconceivable as a world beyond consciousness or the Infinite in absolute

separation from the Finite. For there is no possibility of a thinking activity that thinks on nothing. I can think on space or time or the world or God, but how can I think without thinking on anything? Now, to this pure thought, which is the thought of nothing, Descartes is reduced, because he has removed from thought all that can be an object for it. He has, in other words, reduced the mind to the mere possibility or bare capacity of thinking; but if the mind is the mere capacity of thinking, how can it think itself? A mere capacity cannot think itself as a capacity: to think is the actual exercise of thought, and in this case there can be no actual exercise of thought, because the mind has been reduced to the mere capacity of thinking, a capacity that can never be realized in actual thinking. Plainly, therefore, on Descartes' assumption of the absolute separation of the mind from all reality, we are reduced to the idea of a mere potentiality.

Nor are we even entitled to call this supposititious mind the potentiality of thinking. If I say that a child is potentially a man, I use language that is perfectly intelligible, because I define the character of the potentiality: what I am saying is, that the child has capacities which, when they are realized take the form of the activities characteristic of a feeling, perceiving, thinking being. But if I say that a child is a pure potentiality, without defining the form that this potentiality will take, I am using language that has no precise signification. Of what is the child the potentiality, it is naturally asked? Do you mean that he is potentially a plant, or an animal, or a man? Now, Descartes cannot say that the mind is the potentiality of anything, and therefore his language has no precise sig-

nification. Such a mind is not definable even as mind, since a pure potentiality, if it could be realized, might exhibit the characteristics which Descartes himself ascribes to matter.

(2) Descartes' other assumption, that there is an apprehension by the mind of what is external to it, is equally inadmissible; it is, in fact, but the other side of his assumption that the mind is an independent substance. The material world is conceived by Descartes as in all respects the opposite of mind. The mind is a pure unity, whereas extended substance is pure diversity, being "infinitely self-external or divided into *partes extra partes ad infinitum*." Being thus separated from each other "by the whole diameter of being," the difficulty arises how the mind can know the external world at all. Descartes is practically compelled to *assume* that we have such knowledge. We do not, he admits, directly apprehend the objective world, but we have experience of mental states which we must suppose to represent it correctly. In other words, matter exists beyond the mind, but its action upon the mind takes the form of immediate impressions, which compel us to infer its existence.

Now, it may be shown that this doctrine makes the objective world unintelligible. If I know the material world only through certain mental states of my own, I cannot, on Descartes' premises, attribute these to the object. The impressions of colour, heat, weight, are for me merely my own states. If matter is purely self-external and inert, as Descartes affirms, it is not the subject of states of feeling, such as colour, heat, or weight. Of these I must therefore strip matter. But when these are taken away, matter is no longer definable. A matter

that has neither colour, nor heat, nor weight, is indistinguishable from pure extension. This Descartes himself saw, and hence he held the curious doctrine, that wherever there is space there is matter. But space is no more knowable on Cartesian principles than matter, since it exists for us only in the form of our own mental states. We must therefore deny even extension to matter. What remains? Simply the bare idea of something that cannot be further defined. All that we can say of it is, that it is that which is capable of acting on the mind.

Now, if we bring together the two sides of the Cartesian doctrine, we get this result: that Mind is the pure capacity of thinking, and Matter the pure capacity of acting. But we have seen that a mere capacity may be the capacity of anything. Hence there is no recognizable distinction between mind and matter. The opposition of subject and object disappears, and leaves us with the idea of pure potentiality, and pure potentiality is no reality, being in fact indistinguishable from pure nothing. Thus the Cartesian doctrine of the separation of mind and matter leads to the denial of all knowledge.

I have made this criticism of the Cartesian theory of knowledge in order to show that existence cannot be divided up into two antithetical halves. If the objective world is in its nature entirely foreign to the knowing subject, knowledge is impossible. If man can know only his own subjective states, he is necessarily shut out from all apprehension of objective existence. Now, we have potentially seen that it is a contradiction in terms to affirm Descartes know reality to be unknowable. Let us then anything from the principle that the objective world is not

essentially foreign to us, but is something that we can know and understand. If that is true, we must hold that the world is in itself essentially rational, *i.e.*, it forms a connected system of things. Because of its rationality, it can be comprehended by reason. Hence, in every act of knowledge, man finds the world to be partially reducible to an intelligible system, and the progress of knowledge will just consist in the gradual extension of the consciousness of systematic unity in the world. But in knowledge man not only finds the world to be rational, but he finds that he is himself rational. It is in virtue of his own intelligence that he is capable of finding the world intelligible. And he cannot learn his own rationality apart from the process by which he gains a knowledge of the objective world. Thus the development of the consciousness of what his own nature essentially is, is at the same time a development of his knowledge of objective reality. In man there is a principle, the principle of rationality, which gives him a mastery over the world, just because in the world that rationality is already implied. The whole process of knowledge may thus be viewed either as the development of man's consciousness of the world, or as the development of man's consciousness of himself.

Now, if knowledge is of this character, it is plain that, just in so far as we have knowledge we are freed from any unintelligible force acting externally upon us. In so far as primitive man learned the properties of the objective world, he was free from their influence. Having this knowledge he was not subject to nature, but he subjected nature to himself. His environment was not something that acted upon him externally, but something

that he could comprehend and therefore master. The only external force that acted upon him was the force he had not yet learned to understand. And the development of man has been a continuous process of mastering the world more and more perfectly. When we learn the meaning of any fact—say, the fact of electricity—it ceases to be something foreign to us; it does not master us, but we master it. The only limit to man's subjection of the world to himself is his ignorance. But even this limit is never absolute, firstly, because, even when some special fact is not yet put in its proper place in the whole intelligible system of things, we yet are conscious that it can be known; and, secondly, because our ignorance is never absolute, but always rests upon partial knowledge.

We may now see, I think, that the principle of natural selection cannot explain the knowledge of man. That principle assumes that man is incapable of rising above his immediate circumstances. Knowledge is supposed to be the product of the action of the environment upon certain inherited tendencies. But these inherited tendencies we have seen to be but another name for the capacity of grasping the nature of the environment; and this capacity cannot be explained as the mere effect of the environment; on the contrary, it implies a comprehension of the nature of the environment, and the power of adapting it to himself. We must therefore say, that man's knowledge begins in the partial subjection of external circumstances to his ideal of himself, and that the development of knowledge consists in an ever more complete realization of himself by means of an ever greater mastery of the law of the world. In so far as he knows man is free. We might say, in fact, that the

history of man's knowledge is just the history of his substitution of the higher law of reason for the lower law of natural selection.

DOES NATURAL EVOLUTION EXPLAIN MORALITY?

It may be shown by similar reasoning that all attempts to explain morality by means of natural evolution are equally unsuccessful. If we accept this view there is no possible freedom of action, and no distinction between morality and nature. (1) There is no *freedom*, because the actions of man are determined by the natural impulse to pleasure, and that impulse again is due to the action of the environment upon the individual's inherited disposition. (2) Nor is there any moral as distinguished from natural activity; for morality is simply a name for the actions that give more pleasure than pain.

Now, I have tried to show that knowledge implies freedom, because it lifts man above the flux of immediate impressions and so liberates him from the tyranny of the sensible. Similarly, it may be shown that in his action, as properly understood, man is free because he is not under the dominion of immediate impulses.

We are told that primitive man inherited from his animal progenitors two opposite tendencies—the tendency to seek his own good and the tendency to seek the good of others; and which of these shall be predominant will depend upon the environment. Look, first, at the supposed selfish tendency or impulse. This tendency in primitive man, we must suppose, took the form of a struggle for his own existence and for the satisfaction of his natural wants. These wants were mainly food and

shelter. Man by his nature as a living being had for these a strong desire, and to get them he was ready to sacrifice all other beings. In particular, he had to struggle with the forces of nature and the lower animals, and individual men had to struggle with one another. Observe, however, that the superiority of man over the lower animals, and of one man over another, arises mainly from the fact that he had a better knowledge of the environment, and by means of this knowledge he could turn it to his own use. He made circumstances the means of satisfying his natural wants. But this adaptation of means to ends presupposes in man an idea of the end which he desired to obtain. He desired to secure the satisfaction of his natural desire for food and shelter. In other words, he not only *possessed* the impulse to maintain his life, but he grasped so far the *meaning* of the impulse. Thus primitive man had a conception of himself as capable of being satisfied. This, indeed, was the necessary condition of a selfish struggle for maintenance at the expense of others. There can be no selfishness where there is no consciousness of self. We thus see, that, just as the knowledge of man implies liberation from the crowd of impressions that are perpetually coming and going, so desire implies liberation from the immediate impulses that arise from time to time.

If man were merely the passive recipient of impulses that arise on occasion of external stimuli, he could have no consciousness of himself as a possible subject of satisfaction or dissatisfaction. If primitive man, as is affirmed, had a strong tendency to seek his own good, he must have had the *consciousness* of his own

good as distinguished from the good of others. He could not seek for the satisfaction of *himself*, if he had no idea of himself: he could not seek to satisfy himself at the expense of others, unless he contrasted himself with other selves. What is spoken of as a primitive selfish impulse was not a mere impulse: it was not a mere feeling of the absence of pleasure, but the consciousness of self as capable of being satisfied and the effort to obtain that satisfaction at whatever cost to others in the way of their dissatisfaction. Obviously, therefore, we cannot explain the desire for self-preservation as due merely to the excitation of an inherited impulse. The natural appetite for food cannot be called a selfish tendency; it becomes selfish only when the individual is conscious of the object of appetite, and when setting that object before his consciousness he seeks to realize it irrespective of the claims of others. It is by learning the *meaning* of his immediate wants that man learns to satisfy them; he comes to apprehend their law, and to seek in external nature for the means of their satisfaction. Now, as we have seen in the case of knowledge, to grasp the law of things is to gain a mastery over them, and the only limit to this mastery lies in ignorance of their law. So primitive man, apprehending the object of his appetites and learning the means by which they could be satisfied, was enabled to satisfy his wants, *i.e.*, to satisfy himself. To speak of such purposive activity as the action of external circumstances upon an inherited disposition is meaningless: the fact is that man, grasping the law of his environment, and grasping the law of his own nature, turns the environment into the means of realizing his ideal self. He is

not subject to his impulses, but he subjects his impulses to himself.

We may see the same thing if we look at what are called the social impulses. There is a tendency in man to seek the good of others as well as of himself. If so, he must be capable not only of abstracting from his own immediate impulses, but of putting himself at the point of view of others. Not only does he conceive of himself as a possible subject of satisfaction, but he conceives of others in the same way. Thus he rises to the point of view of a community of selves, each of which has a claim to self-satisfaction. What he now contrasts is his own possible self with the possible self of others. And he is capable of foregoing a certain form of self-satisfaction in order that others may obtain a more complete self-satisfaction. The savage may seek the good of his tribe even at the risk of losing his life. What does this mean? It means that he has risen above the ideal of his own individual self, and grasped the idea of a common good. The explanation given of this higher consciousness is that the individual feels pain when he acts contrary to the common opinion of his tribe. But, in the first place, this does not account for the common opinion. If the tribe condemn action that has for its end the good of the individual as opposed to the good of the community, it is because there has arisen before their consciousness the ideal of a self that can find genuine satisfaction only in seeking the good of all. It is therefore implied that selfishness is not the way to obtain the satisfaction of the individual. It is implied, in other words, that man is by his very nature social,

and forms part of an organism in which the good of each is bound up with the good of all. And, in the second place, the feeling of dissatisfaction experienced by the individual when he acts contrary to the common opinion rests upon the very same consciousness of a self higher than his merely individual self. It is because he has the same consciousness of a social self as is embodied in common opinion that the individual man is dissatisfied with himself when he has sought for the satisfaction of his own separate self at the expense of others. Thus what is called the "social impulse" really involves the idea of a community of self-conscious beings, all of whom are selves and can find their own satisfaction only in seeking the good of all. To speak of the environment acting on the individual is to leave out of account all that makes sociality intelligible. For the environment here can only mean the constraining power of that higher consciousness of his true self which is revealed to man in virtue of his reason. Learning that his true nature can be realized only by self-identification with the common weal, the individual man is not externally acted upon by a foreign influence. In submitting himself to the law of reason he is submitting himself to his true self, and such submission is true freedom.

CHAPTER VIII.

PHILOSOPHY OF MIND.

SPENCER AND THE SCIENTIFIC EVOLUTIONISTS.

We have seen that neither man's knowledge nor his moral consciousness can be explained on the principle of natural evolution. To know is to be beyond a mere state of passivity: it is to grasp the meaning of existence in virtue of a principle implied in the very nature of the knowing subject; to will is to realize an ideal presented to himself by the subject, an ideal which he has just because he is not limited to his immediate impulses but can put himself at a universal point of view. The progress of knowledge consists in an ever fuller comprehension of the meaning of the world; the progress in morality consists in an ever fuller realization of what in his ideal nature man truly is. And these two sides of man's nature—his intelligence and his will—his consciousness of the world and his consciousness of himself—do not develop independently of each other; for as man learns to comprehend the meaning of the world he also learns to comprehend himself. Now, there is great danger of losing sight of this truth. When we once see that mind cannot be

explained on the supposition that the world acts externally upon it, we are tempted to say that mind is independent of the world and develops apart from it. Starting from this side of the subject, we seem to find that it can know nothing but its own states. Thus we get into a new difficulty. We have seen that there is an apparent conflict between the idea of the finite and the idea of the infinite. We have also seen that there is an apparent conflict between the idea of the world and the idea of self. We have now to consider the apparent conflict between the idea of self and the idea of the world. To some extent this problem has already been dealt with in what was said of the dualism of Descartes. But it will be profitable to consider it in the form in which it has been presented in our own day. I shall therefore state and examine the doctrine of Mr. Herbert Spencer on this point, a doctrine which has secured a number of adherents.

There is one datum of consciousness, Mr. Spencer tells us, that must be assumed by every philosophy, viz., the absolute distinction of subject and object. The world of mind and the world of matter are mutually exclusive; or, as Mr. Spencer puts it, subject and object are "antithetically opposed divisions of the entire assemblage of things." We can analyze our idea of the subject and find out the elements implied in it, and similarly we can reduce our idea of the object to its simplest terms; but there is no possibility of reducing these two ideas further: we cannot identify the subject with the object, or the object with the subject. The distinction of subject and object is "the consciousness of a difference transcending all other differences."[1] This

[1] *Psychology*, § 62.

consciousness must be accepted, because its opposite is not only unbelievable but unthinkable. If I say, "The subject is the object," I have framed a proposition that contradicts itself; for the two terms, "subject" and "object," cannot by any effort be brought before consciousness in that relation which the proposition asserts between them; in other words, to identify subject and object contradicts the very idea of subject and of object, because the idea of the one is absolutely distinct from the idea of the other. The attempt to think subject as object, or object as subject, is as futile as the attempt to think of a square as round, or to think of a straight line as bent. Now, when a proposition cannot by any possibility be thought, its opposite must be true, *i.e.*, we must hold the truth of the proposition, "The subject is not identical with the object."

Now, there is no doubt that Mr. Spencer, in affirming that subject and object, mind and matter, are absolutely distinct from each other, is affirming what the plain man would accept as palpably true. I perceive that tree before me, but *I* am not the tree: I am a perceiving, conscious, thinking being, whereas the tree has no perception, no consciousness, no thought. The tree, it will be said, has properties that distinguish it *toto coelo* from me, the subject that perceives it; and therefore the subject is quite distinct in nature from the object. Mr. Spencer can therefore apparently find support for his opposition of subject and object in the ordinary consciousness of men.

But it is very doubtful if the man of common sense would be willing to follow Mr. Spencer when he goes on to reduce subject and object to their lowest terms.

What is the nature of the object and of the subject? The moment Mr. Spencer proceeds to answer this question, it becomes obvious that his conceptions of object and subject are very different from those ordinarily held.

Mr. Spencer, then, starts from the opposition of subject and object, and then he goes on to ask how the subject comes to have a knowledge, or an apparent knowledge, of the object. When we speak of the objective world we are thinking of sensible things in space and time; or, in Mr. Spencer's words, of "relations of sequence and relations of coëxistence." How do we get a knowledge of these relations? Mr. Spencer's answer is, that we are conscious of a relation of sequence in every change of consciousness. I may have a series of impressions of sound, and the consciousness of this series gives me the apprehension of the relation of sequence. But I obtain the same apprehension in the consciousness of any series of impressions whatever. Thus, my perception of the colour of this desk is given in a succession of impressions of colour; and so also is my apprehension of its hardness and smoothness, its resistance and weight. Primarily, therefore, all our perceptions take the form of a succession of impressions. States of consciousness are serial, not coëxistent. Originally, therefore, we have a consciousness only of the relation of sequence, not of the relation of coëxistence. How, then, do we advance from the consciousness of sequence to the consciousness of coëxistence? How, out of a succession of impressions, do we obtain the consciousness of what is not successive? Mr. Spencer's answer is, that there are certain sequences of impression that do not occur in a fixed order, but can be taken in any order. The series of impressions

called sounds come in a certain order, but the series of impressions called colours, or tastes, may appear in a different order. Thus, I can apprehend the colour of this desk either by running my eye along the surface from left to right or from right to left. Thus we come to distinguish between sequences proper, and sequences which are only successive in our apprehension. The former is the consciousness of the relation of sequence, the latter the consciousness of the relation of coëxistence. Now, we have many experiences of these two kinds of relation, and hence we form an abstract conception of sequence and an abstract conception of coëxistence. The abstract of all sequences is time. The abstract of all coëxistence is space.

You will observe that Mr. Spencer here assumes that the individual has a direct consciousness only of his own impressions. For him the properties of the object exist only as a series of states in his own mind, and it is out of this series that he constructs the consciousness of coëxistence. There is, Mr. Spencer would say, a *correspondence* between the states of the subject and the properties of the object, but not an identity. This correspondence he explains more fully in treating of the relation between mental states or "feelings" and the nervous changes that accompany, but are distinct from, these feelings. The parallelism is set forth with great minuteness. Thus, (*a*) nervous action occupies appreciable time, and so also does feeling; (*b*) each nervous action leaves a partial incapacity for a like nervous action, so each feeling leaves a partial incapacity for a like feeling; (*c*) other things being equal, the intensities of feelings vary as the intensities of the correlative nervous

actions; (*d*) the difference between direct and indirect nervous disturbances corresponds to the difference between the vivid feelings we call real and the faint feelings we call ideal.

But the parallelism is even closer. We are apt to suppose that the individual sensations and emotions we experience are absolutely simple. But they are not really so. A musical sound, for example, is supposed to be a simple feeling. If equal blows or taps are made one after another at a rate not exceeding some sixteen per second, the effect of each is perceived as a separate noise; but when the rapidity with which the blows follow one another exceeds this, the noises are no longer identified in separate states of consciousness, and there arises a continuous state of consciousness called a tone. Thus an apparently simple feeling is really composed of various feelings. Now we must suppose, in the same way, that all kinds of feelings are really complex, though apparently simple. Nay, must we not suppose that *all* feelings are made up of elements that in the last analysis are absolutely identical in their nature? To this primordial element of consciousness a nervous shock of no appreciable duration may be supposed to correspond.

You will see from this how far Mr. Spencer has travelled from the point of view of common sense. The mind he conceives as made up of ultimate units of feeling, absolutely identical in their nature, just as all nerve action is reducible to simple indistinguishable nervous shocks. The subject, in other words, is in its ultimate nature not the subject that we ordinarily suppose it to be, but a collection of primitive atoms of feeling, just as the object is a collection of primitive units of force.

Thus the whole complex variety of existence disappears, and what is left is a subject composed of indistinguishable units of feeling, and an object composed of indistinguishable units of force.

Mr. Spencer thinks that he has thus proved the independence of subject and object, while he has at the same time established their correspondence. We can reduce the subject to units of feeling, and the object to units of force; but we cannot reduce units of feeling to units of force: this is the "difference transcending all other differences," the distinction "never to be transcended while consciousness lasts." There is one difficulty, however, in maintaining this absolute dualism of subject and object to which Mr. Spencer himself refers. If the subject is absolutely separated from the object, how does it ever apprehend the nature of the object? As a conscious subject I am aware only of my own feelings; how then do I know that the object is composed of units of force? For me force presents itself simply as a *feeling* of resistance, and a feeling is separated from a unit of force by the whole diameter of being. No relation of consciousness, as Mr. Spencer admits, "can resemble, or be in any way akin" to the actual relations of things. Hence we must say, that "beyond consciousness" there are "conditions of objective manifestation which are symbolized by relations as we conceive them." These conditions we cannot know; yet we are compelled to hold that the distinction of units of feeling and units of motion is a distinction relative to our consciousness: it is "one and the same Ultimate Reality, which is manifested to us subjectively and objectively." But while the nature of that which is manifested under

either form proves to be inscrutable, the order of its manifestations throughout all mental phenomena proves to be the same as the order of its manifestations throughout all material phenomena. Mr. Spencer holds, in short, that we do not know reality in its absolute nature, but we find that it presents itself to us in two parallel forms, which correspond exactly to each other. The development of the one goes on *pari passu* with the development of the other. For example, the nervous system is in the lower animals indefinite and incoherent, but as higher forms emerge there is a gradual advance in integration, complexity, and definiteness. So mind in the lower animals is simple, vague, and incoherent, but when we pass to man, we find that there is a remarkable differentiation and complexity. We must hold, then, on the one hand, that there never is a feeling without a corresponding nerve-movement, or a nerve-movement without a corresponding feeling; but, on the other hand, we must maintain that each is but a manifestation of a single reality which to us appears in these two forms. In other words, if we could contemplate reality as it truly is, we should find that in it the distinction of subject and object is abolished; but the character of our intelligence makes it impossible for us to get beyond the absolute dualism of subject and object, because that dualism is the fundamental condition of consciousness itself.

Mr. Spencer's conclusion then is, that we cannot know the ultimate nature of mind any more than we can know the ultimate nature of matter. Granted that a feeling in consciousness and a molecular motion are the subjective and objective faces of the same thing; yet "we are incapable of uniting the two, so as to conceive that reality of

which they are the opposite faces." Consider how we are forced to present each to our consciousness. What for us is matter? It is a complex of states of consciousness, which have objective counterparts that to us are unknown. What is mind for us? It is a synthesis of many feelings, and of the many changes among them. We infer that all our feelings are probably formed of ultimate units of feeling or mental shocks, but we cannot think of such shocks except as undergone by an actual substance. Now "we can form no notion of a substance of mind that has no attributes, and all such attributes are abstracted from our experiences of material phenomena. How can we think of the changes of consciousness except as caused, and how can we think of any cause except as some form of motion?"

"See then," says Mr. Spencer, "our predicament. We can think of matter only in terms of mind. We can think of mind only in terms of matter. When we have pushed our explorations of the first to the uttermost limit, we are referred to the second for a final answer, and when we have got the final answer of the second, we are referred back to the first for an interpretation of it. We find the value of x in terms of y; then we find the value of y in terms of x; and so on we may continue for ever without coming nearer to a solution. The antithesis of subject and object, never to be transcended while consciousness lasts, renders impossible all knowledge of that Ultimate Reality in which subject and object are united." The true conclusion is, that "it is one and the same Ultimate Reality which is manifested to us subjectively and objectively."[1]

[1] *Psychology*, §§ 272, 273.

Mr. Spencer, then, holds that there is no way of reducing mind to matter, or matter to mind. To the same effect Dr. Tyndall tells us that "the passage from the physics of the brain to the corresponding facts of consciousness is unthinkable. Granted that a definite thought and a definite molecular action in the brain occur simultaneously, we do not possess the intellectual organ . . . which would enable us to pass by a process of reasoning from the one to the other. They appear together, but we do not know why." And Professor Huxley says, "I know nothing whatever, and never hope to know anything, of the steps by which the passage from molecular movement to states of consciousness is effected."

Now, if we accept this absolute dualism of subject and object, mind and matter, we must be prepared to say that we can know nothing of the ultimate nature of reality: our consciousness of self is in irreconcilable antagonism to our consciousness of the world. And this involves no less than a surrender of the special problem of philosophy, the problem to find a unity which shall comprehend and explain all differences. Before committing ourselves to this hopeless view of the problem of knowledge, we must ask whether the fault may not lie rather in a false theory than in the limited nature of our intelligence.

The following propositions are maintained by Mr. Spencer:

1st. We are conscious of an absolute distinction between subject and object, mind and matter.

2nd. The object is conceivable only as a complex of feelings or mental states; the subject only as a complex of movements.

3rd. The ultimate constituents of the subject as known are simple feelings, the ultimate constituents of the object as known are simple movements.

4th. There is an exact correspondence, but no connection, between the feelings of the subject and the movements of the object.

5th. In their real nature subject and object are identical, though we are unable to comprehend that identity.

"All which propositions," to apply the famous words of Carlyle, "I must modestly but peremptorily and irrevocably deny." The ground on which I base that denial may be best understood by an examination of the first of these propositions, on which all the others depend.

EXAMINATION OF MR. SPENCER'S OPPOSITION OF SUBJECT AND OBJECT.

The fundamental proposition which Mr. Spencer seeks to establish is, that subject and object are for us absolutely exclusive of each other, because their separation is bound up with the very nature of consciousness. By no effort can I think of subject as object, or object as subject. The elimination of this distinction would be at the same time the destruction of consciousness.

Now, it may be shown that Mr. Spencer has here confused two quite distinct propositions: firstly, that we are conscious of the subject as *separate* from the object, and, secondly, that we are conscious of the subject as *distinguishable* from the object. But, so far from these two propositions being identical, they are contradictory the one of the other. The first is false, the second is true; and it is because Mr. Spencer seems to be affirming

the second, when in reality his theory compels him to deny it, that he is apt to get credit for making out his case. I shall therefore begin by pointing out the distinction between these opposite propositions.

(*a*) If I say that I am conscious of the subject as *separate* from the object, I am claiming that I can conceive the subject by itself, without in any way introducing the conception of the object. Now, we saw in considering the dualism of Descartes that this is impossible. Remove from the conception of the subject all relation to an object, and what remains is not the pure subject, but a pure blank. The very meaning of subject is that which is relative to an object. If the subject is not conscious of an object, it cannot be conscious at all, and in the absence of all consciousness the subject has no properties by which it may be thought.

Perhaps it may be answered that the object of which the subject is conscious is simply its own state, and that in being conscious of this state it has an object before it, but not the external object. In this case, we shall have to say, that we can think of the subject as conscious of its own states—as conscious of an *internal* object—without thinking of it as conscious of anything beyond its own states, *i.e.*, any *external* object. This in fact is what Mr. Spencer does say: he tells us that for the subject the object is always simply its own feelings. We must now suppose the subject with its own states to stand on one side, and the external object with its properties to stand on the other side; and the contention is, that we can think of the subject as conscious of an internal object, without thinking of an external object at all.

Now, a subject conscious *only* of its own states would

manifestly never become conscious of any *external* object. For, if it should ever break through the charmed circle of its own inner life, and get even a glimpse of the object asserted to lie beyond, it would no longer be confined to the internal object, but would have passed over to the external object. Remember, now, that the subject which is so confined to a purely internal life is the human subject. Mr. Spencer must therefore suppose that in his consciousness he is absolutely confined to his own internal states, or, in other words, can have no idea of any object other than those states—no idea, that is, of an external object. But if so, the primary datum of consciousness cannot be the absolute distinction of subject from object, by which is meant the absolute distinction of the internal life of the subject from an external reality lying beyond. The primary datum of consciousness must be the consciousness simply of self and the states of self. The subject can neither perceive nor imagine anything but his own states, and therefore the supposed opposition of internal subject and external object is for him impossible. The external object has vanished.

(*b*) We have seen then that the consciousness of a *separate* and independent subject, having no relation to any external object, leads to the denial of all objectivity, *i.e.*, of all reality other than the states of the subject. Let us now see whether the same difficulty besets the proposition, that subject and object are *distinguishable* but not separable.

I can distinguish a centre from a circumference, the one end of a stick from the other, an inside from an outside, the convex and concave sides of a sphere; but can I *separate* either from the other? Manifestly not: it is

impossible to think of a centre without relating it to a circle, of one end apart from the other, an inside without an outside, convex without concave. The question is whether subject and object are not of this nature: distinguishable but not separable. We have already seen the difficulties into which we are driven if we suppose the subject to be separate from the object, and to be aware only of its own states. These difficulties suggest that subject and object are not really separable; but, on the other hand, there seem to be as grave difficulties in the way of accepting the doctrine that they are only ideally, not really separable; and of these we must take account.

That subject and object are absolutely diverse in their nature, and therefore exist in complete independence of each other, seems to be at first sight a simple statement of an undoubted fact. The dualism of subject and object is apparently indubitable, whether we look at the nature of the one or of the other. Look first at the object.

(*a*) If it is said that the object is of the same nature as the subject, it is naturally objected that the object has a nature of its own independently of any knowledge of it by the subject, and independently even of the existence of the subject.

(1) The existence and nature of the objective world, it is said, is not dependent upon the knowledge of its nature by any human being. The fire goes out whether I am asleep or awake; visible things are continually undergoing changes that have no dependence upon the apprehension of them by man; gravitation acts whether I know it to act or not. What knowledge reveals to me is what already exists, not what comes into being only

when I apprehend it. Were it otherwise, it may be said, things would be continually coming into existence and going out of existence. Nothing, in fact, would exist except at the moment when it was present to somebody's consciousness. And this leads to manifold absurdities. To suppose that the world in which we dwell, and the infinite host of heaven, are continually created and destroyed as they are or are not objects of human consciousness is the greatest of all absurdities. It is the dream of men who are so intoxicated with ideas, that they have lost all hold of facts. The theory even implies that there are as many objects as their subjects. For the object of each conscious subject will be distinct. Plainly, therefore, the existence and nature of the object is not dependent upon the knowledge of the subject.

(*a*) Again, the existence of the objective world is independent of the existence of the subject, because it existed prior to the existence of the subject. We know that, long before conscious beings were on the earth, there were other forms of existence. There was a time when our whole solar system was as yet unformed. It was after millions of years that the primitive nebulous matter shaped itself into distinct worlds, and millions of years elapsed before man appeared on the scene. How then can it be denied that the object is independent of the subject? Can any one seriously maintain, that the object cannot exist without the subject, when the object as a matter of fact did exist before there was any subject?

(*b*) The independence of the subject seems to be equally manifest. We say that the subject cannot be of the same nature as the object, because its properties are distinct from those of the object. By the object we mean a

form of existence which is neither conscious nor self-conscious; by the subject we mean a form of existence which is both. A stone is not conscious of other objects, nor is it conscious of its own properties. It is not aware that it is one of an infinite number of things, partly similar, partly different; nor does it perceive itself to be hard, figured, coloured, or to have weight. The subject, on the other hand, is conscious of many other forms of existence besides itself, and of its own peculiar character as a knowing and willing being. How, then, can it be said that the subject is of the same essential nature as the object?

THE IDEALISTIC VIEW OF THE WORLD.

These, then, are some of the objections that may be made to the idealistic view of the universe, which maintains that subject and object are of the same essential nature, and can only be logically distinguished, not really separated. I shall take them up in their order.

(*a*) It is objected that the object is independent of the subject, because it exists and has a nature of its own whether it is known by the subject or not.

What is the "subject" here spoken of, which is declared to have no power of affecting the object? Manifestly, the individual human subject—this man or that—the subject that may either know or not know the object.

Now, the conception of existence which underlies this objection is that individualistic or dualistic conception which we have seen Mr. Spencer to hold. It sets on the one side a number of individual things in space and time, and, on the other side, it sets a number of individual things each endowed with the faculty of knowledge, and

it maintains that the former are real apart from the latter. The changes of things in space and time go on irrespective of the changes which go on in the knowing subjects that stand apart from them. Now, there is no doubt that we do look at object and subject from this point of view, and for certain purposes it is sufficient. If I wish to observe the properties of gold, I may take a particular piece of gold, and, viewing it as if it were a separate and distinct thing, I may note its properties. Thus the chemist finds that gold has this peculiar property, that it is soluble in aqua regia. On the other hand, I may make the knowing subject an object of observation, and I may observe that the subject in knowing is continually passing from one mental state to another, and that these mental states never occur except when certain changes take place in the sensitive organism. Here, again, I am treating the subject as if he were a separate individual, whose whole nature can be determined simply by observation of the changes through which he passes. It is from this point of view that the external object seems to have a nature of its own, apart from the knowing subject, which also has a nature of its own. If, therefore, any one should say that the external object is not independent of the subject, the answer seems obvious, that by its very nature as revealed in observation, it manifestly is independent, since it possesses different properties and goes through changes that are in no way dependent upon the properties and the changes of the knowing subject. And the answer is undoubtedly convincing when it is directed against any one who admits the fundamental assumption, that there are individual things, external and internal. If the objective world can

be properly described as made up of a number of individual things, and if we can similarly speak of a number of individual subjects, it is absurd to say that the former are of the same nature as the latter. Just as an acid differs in its properties from an alkali, so all external objects differ from all knowing subjects in having properties not found in the latter.

But the question arises whether either the object or the subject can be correctly described as individual things having properties peculiar to themselves. Is not this conception of existence false, when viewed from the highest point of view, however useful it may be from the point of view of mere observation?

The objective world, from the individualistic point of view, is made up of a number of individual things in space and time, and each of these is supposed to possess properties peculiar to itself. Now, we have already seen that, so far as the existence of objects in space and time is concerned, no object has a property peculiar to itself. The position of anything in space or time is determined by the position of other things. In other words, the existence of one thing is possible only because it is relative to the existence of all other things. There is only one object or world, and what are distinguished as individual objects are merely particular aspects, from which the one object or world may be viewed. And the same thing holds good if we look at the other properties of the objective world. Weight does not belong as a separate property to this or that thing; it is a property which is constituted by the fact that all the things which we distinguish by their position tend to move towards one another at a certain rate. Similarly, what

we call the chemical properties of sensible things are relations, belonging to things not as individual, but as parts of a single universe. Hydrogen and oxygen are relations *between* things, not properties attaching to things in their isolation and independence.

Speaking of the objective world in the ordinary sense of external reality, *i.e.*, reality in space and time, we find that it is not made up of separate things, but is a single indivisible unity of which all the supposed separate things are but phases or aspects. Now, it is true that when we have reached the conclusion that there is only one object or world, not a number of individual objects, we have still left opposed to it a number of individual subjects, each having a specific existence and nature of its own; *i.e.*, we have still left an apparently absolute opposition between subject and object. But, if we have found that there are no absolutely individual objects, is it not reasonable to suppose that there are no absolutely individual subjects?

So far we have spoken of the objective world as if it comprehended only inorganic existence. But this is manifestly an arbitrary limitation. For organized beings are not less real than inorganic things, and therefore we must enlarge our conception of the object so as to include those forms of existence that we distinguish as living. Is organized existence, then, of such a character that it can be described as purely individual? Can we say that there is any plant, or any animal, that lives a life of its own, independently of all relation to other modes of existence?

Now, it is at once manifest that we cannot find among living beings any separate and independent individual,

any more than among non-living things. In the first place, a living being—whether plant or animal—is on one side of its nature plainly a part of the objective world. It has a bodily structure, which displays the same characteristics as other bodies. Thus it is in space and time, it is subject to the laws of dynamics, and it passes through chemical changes. What has been said of individual things as inorganic therefore applies equally to organic things so far as their bodily structure is concerned. That is to say, no living being is an independent individual, but is merely a distinguishable aspect of the one great systematic whole, the object or world. Apart from this whole, it could have no existence. We must therefore widen our conception of the object, and include within it all living beings, so far as these are viewed as having a bodily structure.

But can we stop here? Can we say that in their bodily structure living beings belong to the objective world, while as to their characteristics as living, they are independent individuals? Now, there is no doubt that living beings display characteristics not found in non-living beings. They all, as we have seen, exhibit a tendency to maintain themselves and to continue their species. But this tendency can be realized only in so far as they conform to the conditions of their environment. The possibility of maintaining themselves is therefore possible only in so far as that possibility is implied in the nature of the external world. The living being has a peculiar form of existence, but like other forms it is bound up with the nature of existence as a whole. If it could separate itself from the world, it would cease to be, because the very nature of its existence is, that it

can realize itself only as part of the world. Now, if we find that living beings cannot be separated from other forms of existence, is it not obvious that we must revise our conception of the objective world, and include within it, not merely inorganic existence, and organic existence as to its bodily structure, but organic existence viewed as organic? In other words, by the "object" we must now designate all modes of existence, whether inorganic or organic. The object is therefore not only a systematic unity of parts, but it is in the strict sense an organic unity, *i.e.*, a unity which implies life. But this means that each individual has a life of its own only in so far as it exhibits within itself the life that is implied in the world as a whole.

The life of the individual is thus one phase of the universal life that pulsates through all existence. Change in the smallest degree the laws of any form of existence, and life becomes impossible. Nor can we give any preference to inorganic as distinguished from organic existence; for organic existence is not less real than inorganic. The only way in which it may plausibly be shown that the objective world is not an organic unity is by attempting to reduce life to the mere play of mechanical forces. But the futility of this attempted reduction has already been shown. The differentiation and development of living beings can be explained only on the supposition that by their very nature they have an impulse to self-maintenance and a tendency to organization. And this impulse and this tendency they could not possess were its possibility not bound up with the very nature of the world. The world or object is therefore something more than a system of mechanical forces:

it is a unity containing within itself the principle of life.

From what has been said, it follows that the object must now be conceived to include all modes of existence, organic as well as inorganic. If, therefore, it is still maintained that the object is independent of the subject, this can only mean, that, while all other modes of existence are related to one another in one single system, there is one form of existence which is outside of this system, and belongs to a separate and independent sphere. This mode of existence is mind or consciousness.

Now, it must be observed that we do not find mind existing independently of the objective world. Just as there can be no form of life apart from the whole system of external nature, so there can be no form of mind apart from the organism. We find in animals a peculiar faculty, the faculty of *feeling*, which is not possessed by any other form of being. And we find in man a still higher faculty, the faculty of consciousness. But consciousness is not something that exists irrespective of animal sensation. Just as by means of sensation the animal feels within itself a thrill which expresses the nature of what lies beyond its own organism, so in consciousness man comes to understand and to interpret the sensations and impulses which, as an animal, he possesses. He not only feels but thinks.

Now, if the life of consciousness as it exists in man presupposes the life of sensation and impulse, it is plain that any attempt to isolate the conscious subject from the sensitive subject must result in emptying consciousness of all content. For in his sensitive life man expresses the life which pervades and gives meaning to all objective

existence. To suppose that he can apprehend the nature of existence irrespective of sensation, is to suppose that he can apprehend existence without apprehending it. If in the sensitive life the objective world as a whole is implied, to turn away from sensation is to turn away from the objective world. There is therefore no conscious subject that can be separated from the sensitive subject. And this means that no conscious subject is a separate individual. It is true that by no possibility can consciousness be identified with sensation. To suppose such an identification is to overlook what is characteristic of consciousness. But while consciousness cannot be identified with sensation, any more than sensation can be identified with chemical action, it is none the less true that consciousness is possible only on presupposition of sensation. The individual subject can have no knowledge of objective existence apart from the changing sensations and impulses which are characteristic of his animal life. And the life of feeling, as we have seen, is made possible by the relations which subsist between the feeling subject and all other modes of existence. To apprehend the meaning of feeling is therefore to apprehend the meaning of existence as a whole, *i.e.*, to grasp those various aspects under which the one object may be viewed. Unless the conscious subject is capable of such apprehension, he is incapable of knowing reality as it is. But if his conscious life were something entirely apart from his sensitive life, he could know no objective reality. And without such knowledge he could not apprehend himself. Thus to be conscious of himself is to be conscious that he is related to all other modes of existence, and that apart from such relation he could not exist. But if so, he knows

himself as at once a being who manifests in himself the life of the whole, and a being who is conscious of the life of the whole. From the former point of view, he is a form of the objective world; in other words, the consciousness which presents itself in man is a consciousness that belongs to the very nature of existence. For consciousness is not, as we have seen, something that can be separated from other modes of reality, nor is it something that can be reduced to other modes of reality. None the less, it is possible only because the nature of existence as a whole makes it possible. If consciousness were incompatible with the nature of the universe, it could not be: since it is, it must be regarded as a mode, and the highest mode in which existence presents itself.

We must therefore revise our view of the nature of objective existence, and say that it includes not only all inorganic and organic things, but that it includes as well all conscious beings. In other words, the consciousness of man is a form and the highest form in which existence appears. Now, no other principle than one which is self-conscious can explain the existence of self-conscious beings; and, as these include and yet transcend all other forms of being, the universe must be held to be, when properly understood, self-conscious or rational. Thus, by following out the presuppositions of reality as known to us, we at last reach the idea of an absolute subject-object, in which the distinction of subject and object is seen to be a distinction within an absolute identity. It may therefore fairly be claimed that Speculative Idealism proves the existence of God.[1]

[1] For a fuller discussion, see the author's *Christianity and Idealism*, 2nd ed., chap. xi.

In this short outline of the proof of Speculative Idealism, I have tried to show how, beginning with the first imperfect definition of the object as that which is in space and time, we are forced gradually to widen our definition until we find it embrace all existence. If this proof is at all sound, it follows that there can be no real separation between object and subject. The supposed opposition of subject and object turns out to be simply a distinction in our point of view. When we are looking at the manifestations of intelligence, we speak of the object or world; when we are thinking of the intelligence which so manifests itself, we speak of the subject; but as the manifestations are those of intelligence, and intelligence is what it manifests, the distinction is no real separation. When, therefore, Mr. Spencer tells us that "the distinction of subject and object" is one "never to be transcended while consciousness lasts," we answer that, so far from this being true, the transcendence of the distinction is necessarily implied in the very nature of consciousness. It is in the apprehension of the object that man apprehends himself; in other words, man learns that all existence is rational, and that he himself is rational, because in his intelligence there is contained the same principle as is implied in all existence.

We can now deal very easily with the objection that I have supposed to be raised against the idealist view of existence. It is said that the object must be independent of the subject because it exists whether the subject knows it or not. Certainly, I answer: the individual subject in coming to the knowledge of the object does not bring the object into existence. No sane man makes any such assertion. But this does not show that the

individual subject could have knowledge, were the object generically different from the subject; on the contrary, it shows that it is by coming to a consciousness of what the object is he has knowledge at all. And this means, as we have seen, that the object properly understood includes the subject, or is intelligence. To grasp the nature of the world is thus to apprehend existence as intelligence, and from the point of view of its intelligible nature: it is to see that existence is not only purposive but rational.

(*b*) The second objection to the identity of subject and object was, that the objective world existed before the subject existed. If there was existence before conscious beings came to be, how can it be denied that the objective world is independent of the subject?

This objection is usually urged by scientific evolutionists, who maintain that inorganic things preceded organic, and that living beings without consciousness preceded conscious beings.

Now (1) the first thing to observe here is, that this objection rests upon the same individualistic assumption as the former objection. It is taken for granted that to deny the dependence of the inorganic world upon this or that individual subject is to prove its absolute independence. But we have already seen that there is no purely individual subject, no conscious being who is conscious in virtue of something belonging to his own individual existence; and hence to say that the inorganic world does not depend for its existence upon man, regarded as an individual, by no means proves that the inorganic world can exist by itself. This latter proposition can only be established if it is shown that in the whole realm of

existence there is nothing that cannot be included in the idea and definition of matter; in other words, that without going beyond the conception of existence as extended, moving, and exhibiting physical and chemical properties, we can explain not only organized but even conscious existence. Now, it has already been pointed out, that it is impossible to account even for life, and much less for consciousness, without widening our definition of the object so as to include the new characteristics peculiar to life and consciousness; and hence that the supposition of the separate existence of the inorganic world is an untenable hypothesis.

But (2) the objection we are now considering introduces a new difficulty, drawn from the succession in time of the various orders of existence. The inorganic first existed, it is said, and out of it proceeded, by the operation of ordinary mechanical laws, the forms of existence that we call organic; and similarly, the organic existed prior to conscious existence, and gave rise to it; hence, ultimately, all modes of existence have proceeded from matter. This is the line of thought by which Tyndall, for example, tries to show that matter contains in itself "the promise and potency of all kinds of life."

Now (*a*) you will observe that, if this argument is pressed to its consequences, the conclusion must be that consciousness is simply a mode of matter. The prior existence of matter, it is held, shows that matter was the cause of life and consciousness. Living beings, who did not yet exist, could not be the cause of their own existence, and hence we must attribute their existence to the only cause that existed, *i.e.*, to matter. If this argument is sound, we must hold that consciousness contains in itself nothing

that is not due to matter; in other words, we must hold that mind and matter are identical in their nature. But if so, we can no longer maintain that the conscious subject is independent of the object; we must, on the contrary, maintain that the only existence is the object, and that the supposed independence of subject and object, mind and matter, is a conception which a scientific view of the world shows to be false. On Tyndall's own showing, therefore, subject and object are irreducible only in the sense that they are supposed to be irreducible by those who have not reached the scientific point of view. It is true that he still maintains that we are unable to conceive of the identification of subject and object; but this can only consistently mean that we are unable to get rid of a deeply rooted preconception. We cannot maintain, *both* that mind is a product of matter, *and* that mind is independent of matter: the reasoning by which we establish the former proposition, precludes the possibility of the latter.

Thus we find that the very argument by which it is sought to show that the object is independent of the subject leads to the conclusion that there is no such independence. The object is indeed independent of the subject, but only in the sense that there is no subject. We have not established the separation of mind from matter, but abolished mind altogether. I shall try to show that instead of thus reducing mind to matter, we must hold that matter is a form of mind.

Inorganic existence, it is said, existed prior to life and consciousness, and therefore life and consciousness are the product of inorganic existence. The assumption here is, that consciousness is related to matter as effect to

cause. Before we can admit the validity of this assumption, we must be certain that the relation between consciousness and matter can be conceived as a relation of effect and cause. Now, it is easy to show that the conception of causality here made use of is, at any rate, not the conception that is employed in scientific inquiries. When a scientific man asks what is the cause of the motion of a material body, his aim is to find out the particular conditions which account for this particular event, and the answer that he gives consists in stating those particular conditions. He points out the circumstances that have to take place before the particular event in question can happen. In all cases the circumstances are some form of motion, because in external things change always takes the form of motion. But when the particular mode of motion assigned as the cause of a particular change has been discovered, nothing has been determined in regard to the nature of existence as a whole; all that has been done is to point out the special relation between two events. The idea of cause and effect, in other words, has a perfectly intelligible meaning when it is employed in explanation of particular events, but it does not follow that it has an intelligible meaning when it is employed to explain existence as a whole. When we pass from the one point of view to the other, we must ask whether we have not changed our conception.

Now, if it is said that matter is the cause of life and consciousness, it is plain that by matter cannot here be meant any particular form of material existence. There never is in an effect something essentially different from what is found in the cause. A material body can be called a cause only in this sense, that its motion is the

condition of a motion in another body. The reason for distinguishing a material body from a living or a conscious being is, that while the changes in the former are all modes of motion, the changes in the latter are not modes of motion, but modes of life and consciousness. Now, if a material body, or any number of material bodies, is called the cause of life and consciousness, it is assumed that life and consciousness can be explained simply as modes of motion. If, however, the latter are modes of motion, there is no production of life and consciousness by matter, because there is no life or consciousness to be produced. The contradiction, therefore, to which the conception of matter as the cause of life and consciousness leads is this: If life and consciousness are distinct from matter, they cannot be its effects; and, if they are effects of matter, there is no distinction between them and matter. The ordinary conception of cause and effect thus breaks down when we try to explain by it the relation between matter on the one hand, and life and consciousness on the other. If we hold that matter has a real existence independently of life and consciousness, we cannot at the same time hold that it is the cause of these.

Now the lesson to be learned from this is, that the conception of cause and effect as it is employed in scientific investigation is not adequate as a conception of the relation between existence as a whole and its various modes. We may, if we please, still use the term "cause" to express the relation, but we must give to it a new meaning. Let us see what that meaning is.

Prior to the existence of living beings, there existed inorganic things. Did these inorganic things exist as

separate individuals, or were they only distinguishable aspects of the one systematic unity? The latter, as we have seen, is the true conception. We have therefore to conceive of existence prior to the appearance of life, as one single organic whole. But this organic whole had manifested itself only as that which passed through mechanical, physical, and chemical changes. Now, these changes were not related to the whole as effect to cause; they were simply the distinguishable aspects in which the one universe presented itself. These aspects can be viewed as related to one another in the way of cause and effect, but the universe as a whole is not a cause of which all these aspects are effects; or, at least, if we call it a cause, we mean simply that it is a principle of unity manifesting itself in all change. So conceived, cause must now be regarded as self-cause. That is to say, there is nothing outside of the one unity which explains or accounts for it, since beyond it there is nothing: the only cause to which we can assign it is itself. All forms of existence are therefore explained by this unity, but the unity itself is not explained by anything else.

Now, take another step. At a certain period life makes its appearance. Whence did this life proceed? It proceeded, the scientific evolutionist tells us, from inorganic nature. "Were not man's origin implicated," says Tyndall, "we should accept without a murmur the derivation of animal life from what we call inorganic nature." This language suggests that life is the product or effect of that which is without life, *i.e.*, that all the particular living beings which first appeared on the earth were originated by particular inorganic things. The

radical imperfection of this view has already been pointed out. *No individual thing originates anything;* for every individual is what it is only by reference to the whole system of the universe. What is implied in the origination of life is not that inorganic nature produced life, but that a new form of existence presented itself at a certain period of time in the history of the earth. But this life, although it has for the first time presented itself is not something that has come into being by a power belonging to inorganic things. And no one would be so absurd as to say that it originated from itself. Its origination can be explained only on the supposition that it was implicit in the nature of existence *as a whole.* Outside of the unity that comprehends all possible existence there is nothing; and therefore life, when it appears, merely manifests in an explicit form what was already wrapped up in the one single existence that is manifested in all modes of existence. But, if this one all-inclusive unity is now seen to involve within itself organic as well as inorganic existence, its nature cannot be comprehended by looking at either apart from the other. It is neither inorganic nor organic, but both. Further, organic existence is of this nature that, while it contains all that is implied in inorganic nature, it also manifests characteristics that are peculiar to itself.

The true nature of existence must therefore be defined as organic rather than inorganic; and it is therefore more correct to say, that organic existence has produced inorganic, than that inorganic has produced organic. But both forms of expression are inadequate. For, as no mode of existence originates any other, what we must say is, that in organic existence we have a fuller and

truer expression of the nature of existence as a whole than we have in inorganic existence. Having made this discovery, we can see that in inorganic existence, prior to the rise of life, there was already implied all that subsequently presented itself in organic existence. Thus what is posterior in time is prior in nature: the first is last and the last first.

I think you will now see that there is nothing in the fact that life has appeared subsequent to non-living things to show that the former is dependent upon the latter. Since no form of existence can present itself that lies outside the one unity of existence, we are compelled to relate both to that unity, and to find in life, rather than in matter, the true nature of reality. And, if this is so, there can be no difficulty in seeing that it is meaningless to speak of matter as the cause of conscious existence. To argue that consciousness is due to matter is to fall into the old mistake of taking the order of time as identical with the order of nature, and of attributing to individual things a power of origination that belongs only to the single principle manifested in all things.

Consciousness appeared later than life. Granted; but the consciousness which thus appeared could not arise either from the particular forms of existence prior to it, or from itself: its explanation must be found in this, that existence as a whole contained within itself, prior to its manifestation as consciousness, all that so manifested itself. There can be no absolute origination in the case of existence as a whole, since outside of that whole there is no reality and no possibility. What is shown by the appearance in the world of conscious beings is not a new existence, but a higher manifestation of

the one existence that always was and is and shall be. We must therefore say, that inorganic existence, as well as organic existence, when it is properly understood, is a phase, though not the highest phase, of the single self-conscious intelligence in whom and through whom and by whom are all things. For, since nothing is apart from the unalterable nature of the one Being that comprehends all reality, to understand completely the nature of the simplest form of existence—say, a stone—is to apprehend it as one of the phases in which the absolute intelligence is manifested. It is this that makes all pursuit of knowledge sacred. In learning the properties of a simple blade of grass we are partially apprehending the nature of God.

SCIENTIFIC EVOLUTIONISM AND SPECULATIVE IDEALISM.

These considerations have, I hope, made it plain in what sense idealism maintains that there is no absolute separation of subject and object, mind and matter; that, on the contrary, matter properly understood, is a manifestation of mind. All existence is a manifestation of one supreme all-comprehensive self-consciousness. We may now go on to consider the objection to the identity of subject and object drawn from the character of the subject. It is said that mind must be absolutely independent of matter, because mind is conscious of itself, while matter is not. The idea of the subject thus seems to be exclusive of the idea of the object; or, in Mr. Spencer's language, the distinction is one never to be transcended while consciousness lasts.

This argument manifestly follows a different line of thought from that which we have just considered. So

far from maintaining that consciousness must be regarded as a product of matter, it asserts that by no possibility can consciousness be reduced to matter. Matter has no consciousness of itself, whereas every subject is a subject just because of self-consciousness. It is therefore inferred that the conscious subject is independent of the object.

Now, it is peculiar that we find this argument for the independence and diverse nature of the subject put forward by those who also maintain that life and consciousness are products of inorganic nature. Spencer, Tyndall, Huxley, and others, all maintain that by the one line of argument we are forced to view mind as a mode of matter, and by the other line of argument we are forced to assert that mind cannot be a mode of matter. Their solution of the difficulty is to fall back upon a Power which is neither mind nor matter, but the nature of this Power, they maintain, is absolutely inscrutable to the intellect of man. The self-contradictory character of this solution we have already seen, and hence we must inquire whether we are really forced to maintain that the fact of self-consciousness is inconsistent with the identity of subject and object.

When we find the same writer holding that mind is a mode of matter, and that mind is independent of matter, we may be sure that the "fons et origo" of the two discrepant views is to be found in some false assumption common to both. The assumption here is, that each conscious subject, like each material object, is a separate individual whose nature is not in any way relative to the nature of other individuals. In other words, existence is supposed to be made up of a number of individuals, standing opposed to one another as separate and distinct.

The difference between these individuals is, that some are conscious and some are unconscious; but all alike are what they are in virtue of their own independent existence. The individuality of conscious beings seems to be especially manifest. When I am conscious of myself, I am conscious that I am not to be identified with any other form of existence. I possess, as it has been said, a unique existence and an unsharable consciousness, and to deny my individuality is to deny that I am conscious at all. My sensations, my emotions, my thoughts and volitions are mine, and not those of anybody else. I inhabit a world of consciousness that is absolutely impenetrable, and in virtue of this fact I am a self-conscious subject. My real self is "one and indivisible," different selves are "absolutely and for ever exclusive."

Now, in one point of view, this assertion of individuality deserves the strongest commendation. In maintaining that all forms of existence are individual, it brings into prominence an aspect of reality that is lost sight of when all concrete forms of being are resolved into an inscrutable and unintelligible Power. And in particular, it emphasizes the distinction between beings that are self-conscious, and beings that are not self-conscious, implying that in the strict sense of the term the only true individual is the self-conscious subject, which, in all the changes through which it passes, is aware of itself as identical.

But, while it is an important truth, that individuality can properly be affirmed only of a being that is self-conscious, it by no means follows that to be self-conscious is to be aware of oneself as a separate individual, having no relation to any other existence. It may easily be shown that the consciousness of individuality is on this

supposition impossible. If we suppose that in being conscious of himself, the subject is conscious of nothing else, it is manifest that such a being would have no consciousness even of himself. For all reality would for him be limited to determinations of himself, and therefore he would never contrast with these determinations the determinations of other forms of existence. To be conscious of myself implies that I am conscious of myself as possessing a character which distinguishes me from other modes of being. My individuality is for me the consciousness of what I feel, know, and will. But if I have no consciousness of what is felt, known, and willed by others, I must be incapable of distinguishing between myself and other selves. It is therefore only in relation and contrast to other selves that I become conscious of what I as an individual am. Assume, therefore, that I am absolutely limited to the consciousness of my own feelings and thoughts and volitions, and obviously I should be unaware that others have different feelings, thoughts, and volitions, and therefore unaware of my own peculiar individuality. The consciousness of self is therefore relative to the consciousness of other selves.

It may be said, however, that while I am no doubt conscious of other selves as having feelings, thoughts, and volitions, yet I am capable of distinguishing these from the feelings, thoughts, and volitions which are peculiarly my own, and that the consciousness of what is mine constitutes my peculiar individuality. And this is true; what I feel, think, and will belongs to me in a sense that nothing else does; it is mine because it implies a peculiar self-activity on my part. It is the distinguishing characteristic of self-conscious beings that they

are self-determined. But self-determination is not the same thing as the determination of an exclusive and separate self that has no relation to anything else. This may be shown by a consideration of the two main forms in which self-determination is exhibited, viz., knowledge and action.

(1) *Knowledge.*—To know is to have the consciousness of what really exists. But if we suppose that in our knowledge we are conscious only of our own states, we shall have no consciousness of any reality. Knowledge therefore implies that we can separate between what seems and what is. If in any case we apprehend what is, we do so in virtue of our own self-activity; but what we apprehend is not an arbitrary product of our activity, but what belongs to the actual nature of reality. To know is thus to exercise conscious activity in the apprehension of that which has an existence and nature not determined by the activity. In so far as the activity of self-consciousness is exercised in setting aside what is accidental and illusory, we have knowledge. As far as we have knowledge we have transcended our mere individuality and identified ourselves with the universal. Thus we have realized by our self-activity that which is objective. True self-activity consists in identification with the object; and true individuality consists in the consciousness that our true self is to be found in such identification. Now, if our knowledge were absolutely complete, we should be absolutely identified with the object. Such absolute identification would not be the destruction of our self-activity, but its perfect realization. We therefore see that absolute individuality would mean the absolute transcendence of the opposition of subject

and object. In man, however, this perfect individuality is never attained, but remains for him an ideal which, by his self-activity, he is perpetually seeking to realize. If he had no self-activity, he would never get beyond the first opposition of subject and object; if he had complete self-activity, he would absolutely transcend the opposition. In knowledge he is therefore continually abolishing the distinction between subject and object, but it is a distinction which for him is abolished only in idea. Yet in a sense the opposition is already abolished. For, if he had no consciousness of the ultimate unity of subject and object, he would have no consciousness that in his actual knowledge he falls short of his ideal. It is for this reason that a man is aware of himself as having a peculiar individuality which distinguishes him from other men and from God. But this consciousness of his own individuality would be impossible were he not conscious of being beyond it in idea. It is by reference to the standard of complete knowledge as realized in God that a man is conscious of the incompleteness of his own knowledge: it is by reference to the same infinite standard that he pronounces the knowledge of others to be more or less complete than his own. But in all cases the consciousness of one's knowledge, and the consciousness of the limited extent of one's knowledge, involves the consciousness, actual or ideal, of the unity of self and not-self. So far is it from being true, that to be conscious of self is to be conscious of an exclusive self, that the consciousness of self is impossible except as the consciousness of a self that is identical with not-self.

(2) *Action.*—The same thing may be seen in the case of action. To act morally is to determine oneself in

accordance with the true nature of existence. If I seek my good in what presents itself as good only to me as a separate individual, I shall not realize my true individuality. For, unless I seek my good in what is good absolutely, I shall abandon myself to caprice or to self-will. It is only by willing what is good, absolutely or universally, that I can realize what my true nature fits me to realize. In other words, my self-activity must be determined by the idea of a universal moral law, or it is not a realization of my individuality, because it is contrary to the true nature of the self. Every moral law is a statement of one of the ways in which the subject may realize what in his ideal nature he is. The consciousness of a moral law is therefore the consciousness of one of the modes in which the subject by his self-activity may identify himself with the object. For the ideal self is capable of being realized only as a self existing in a world that in its ultimate nature is consistent with such realization. If the universe were so constituted that it was inconsistent with the realization of what, in his idea, man is, there would be an absolute antagonism between the self-conscious subject and the object. But such an antagonism is disproved by the fact that in the consciousness of the ideal self we already have the promise of the identity of the subject and the object. All moral progress rests upon this idea—upon the idea of an absolute good, which realizes the self because the world exhibits in it a divine purpose. Morality, in other words, is possible at all only if the world is the expression of the divine mind. It is therefore in contrast to the perfect unity of subject and object as conceived to be realized by God, that we become conscious of our own moral

limitations. In the case of man there always is an opposition between the actual self and the ideal, because man's life is never completely moralized; but even the consciousness of his moral imperfection would be impossible were he not conscious of an ideal moral perfection, and conscious of it as the true nature of the world. Thus, in the practical as in the theoretical consciousness of man, there is implied identification of subject and object.

From what has been said you will see that in asserting the identity of subject and object we do not maintain that there is no distinction between beings that are self-conscious and beings that are not self-conscious. What we maintain is, that, as every phase of the world must ultimately be viewed as a manifestation of one self-conscious intelligence, so the true life of man consists in coming to the consciousness of this intelligence and in identifying himself with it. True individuality is self-activity in identifying oneself with the object; and just in so far as a man fails in this he fails in knowledge and in morality.

MR. SPENCER'S PSYCHOLOGY.

I have dealt thus fully with Mr Spencer's first proposition, because it lies at the basis of his whole system. It will not be necessary to consider the other four propositions which he maintains, but a few words may be devoted to his second proposition, that the object is for us a complex of feelings, and the subject a complex of movements. Let us take each of these assertions by itself.

(*a*) The object is conceivable only as a complex of feelings. My perception of any object is not an appre-

hension of the object in itself, but only of the impressions which it produces in me. These come in an order of succession, and therefore the perception of coëxistent objects is in reality only the consciousness of a reversible order in my impressions as distinguished from an irreversible order.

Now, Mr. Spencer here fails to distinguish between a mere series of feelings and a conceived order of objective reality. He assumes that the *occurrence* of feelings is the same as the *consciousness* of their occurrence. But it is easy to show that if the object were reducible to the mere occurrence of feelings, there would be no consciousness of their occurrence, and therefore no consciousness of an orderly system of things. To be conscious of feelings as related in time is to be beyond mere feelings. This becomes at once evident if we suppose our consciousness reduced simply to the occurrence of feelings. Take, *e.g.*, the occurrence of a number of feelings of sound. (1) If there is in the consciousness of such feelings nothing but the feelings themselves, each feeling of sound will exist only so long as it is felt. But the consciousness of a *series* of feelings cannot be derived from a number of distinct feelings. To have the consciousness of a series there must be the consciousness of the one as distinguishable from the other. To simplify the matter, let us suppose that in their content all the feelings are the same. But manifestly we cannot be conscious of feelings as different, unless we are conscious of them as not absolutely identical. In the present case the difference is purely one of time; if, therefore, we distinguish the one from the other, we must do so on the ground that one precedes and the other follows.

Now, this distinction of before and after is a distinction of *relation*, and therefore it involves the consciousness of a relation—the relation of time—between one feeling and another. This capacity of relating one feeling to another cannot be attributed to the feelings themselves, but involves the capacity of grasping time as a unity of distinguishable moments. That is to say, in the consciousness of a series of feelings thought is involved. It is for this reason that I become conscious of all feelings as related to one another in the way of time. And time, as the universal form in which all feelings are related, is not a variable element in my experience; it is a fixed or unalterable relation. Here, then, we have one of the simplest forms in which the consciousness of objectivity presents itself. In being conscious of all feelings as related in the way of time, I have apprehended a universal and necessary relation; and a universal and necessary relation is what we mean by objectivity.

You will thus see that it is quite untrue to say that the object is for us a complex of feelings. No number of feelings could ever give us the consciousness of time, and therefore the consciousness of feelings as following in a fixed order in time. The object is not a collection of feelings, but the consciousness of a systematic unity which determines feelings to a fixed order. To be conscious of an object at all, we must have the conception of time as an absolute unity. Hence the conscious subject in the apprehension of his various feelings as successive has already got beyond a series of subjective states, and has grasped these under the objective form of time.

(*b*) The subject, Mr. Spencer says, is conceivable only as a complex of movements. If the mind experiences a

feeling, this feeling can only be conceived after the manner of a movement in the bodily organism. Thus we are forced to represent the relation of our feelings to one another in terms of the action of one material particle on another. Mr. Spencer indeed denies that this is an adequate view of the nature of mind, but he says it is the only view that makes the fact intelligible to us. Changes of feeling are really different in kind from material movements, but yet we must symbolize the changes of feeling as movements.

Now, the difficulty Mr. Spencer has in apprehending the nature of mind is not due to any limitation of our knowledge, but to a false view of the nature of mind. Any attempt to comprehend the nature of consciousness by conceiving of it as made up of separate units of feeling is certain to lead us to suppose that we cannot comprehend mind as it truly is, and have therefore to represent it as it is not. For consciousness is not an assemblage of separate feelings. To suppose it is, leads, as we have seen, to the denial of all consciousness. The distinguishing characteristic of consciousness is, that in all its changing phases it remains identical with itself; what it distinguishes from itself is always a particular aspect of reality, but all aspects of reality are in relation to the one indivisible self. To speak, therefore, of feelings in terms of nerve-movements is virtually to abolish the distinction between a feeling and a nerve-movement. Now, a feeling as it exists for consciousness is always a particular phase of reality as related by thought to other phases of reality. Apart from consciousness, the feeling has no existence as a known object; *as* a known object, it implies the universalizing activity of the one identical subject. But, if prior to the consciousness of the feeling there is no

known feeling, to speak of a nerve-movement as if it could explain feeling is to assume that a peculiar form of reality can be explained without any reference to that without which it could not exist at all. Consciousness cannot be expressed in terms of motion, because, without supposing consciousness to be distinct from motion, there could be no consciousness at all.

In the last two chapters the general character of the moral consciousness of man has been incidentally characterized, but it is necessary to consider more carefully the problems which arise in connection with that consciousness. The discussion of these problems constitutes Moral as distinguished from Mental Philosophy.

CHAPTER IX.

MORAL PHILOSOPHY.

IDEA OF DUTY.

In our ordinary moral consciousness we distinguish between what *is* and what *ought to be*, just as in our ordinary theoretical consciousness we distinguish between what *seems* and what *is*. We are continually passing upon ourselves or others such judgments as "This *ought* to be done," "That *ought not* to be done." In making such judgments we assume that there is right and wrong conduct, and that action, whether right or wrong, is to be attributed to an agent. In other words, we find in our ordinary consciousness two correlative ideas,—the idea of *Duty* or moral obligation, and the idea of *Freedom* or self-activity. These two ideas lie at the basis of all our moral conceptions, and with them Ethics, as the science of conduct, has mainly to deal. We shall deal first with the idea of duty.

In the first place, the idea of duty implies an opposition between an *ideal* or intelligible world and the *actual* world. This ideal world is conceived as that form of existence which a man *is to* realize, as distinguished from the form

of existence that he *has* realized. In idea man is a member of the intelligible world, and if he were complete man, he would no longer find any discrepancy between what he ought to be and what he is. But primarily the intelligible world is not an achievement but a prophecy, not something that man is but something he ought to be. And this is true whether we look at the individual man or at the race. The individual man has an idea of himself as realizing what he ought to realize, but it presents itself to him as an ideal, because he has not realized it. It is in contrast to this ideal of himself that he becomes conscious of the imperfection of his actual self. If he had no idea of himself as a being that ought to live the ideal life, he would not be aware that "in all things he offends and comes short of the glory of God." The same thing is true of the race. The moral progress of humanity is made possible by an ideal of humanity as it ought to be but is not. There always is in all the strivings of man an ideal man which is set up as the true man, and this ideal is conceived as the real that ought to be, though not the real that is. We can therefore understand why Plato maintained that the ideal is the real. The ideal is the real, not because it is the actual, but because it is what ought to be actual. Man recognizes that his true self is the ideal or moral self, not the self that at any time actually is.

Hence, secondly, the idea of duty implies an opposition between a *law of reason* and a *law of natural inclination.* The law of reason is recognized as that which expresses the true end or destiny of man, the man as he ought to be; the law of inclination as that which expresses what man, in so far as he fails to realize the ideal end, actually

is. There is in man an opposition between his desire for the realization of the ideal self, and his desire for the gratification of the lower self, an opposition between the life of spirit and the life of nature.

Now, it is of supreme importance to apprehend the true relation of the ideal and the actual self, the life of spirit and the life of nature; for upon this apprehension mainly depends the character of our ethical theory.

The first view of the relation of the natural and the spiritual self which we are inclined to take is that they are *absolute opposites.* I find within me, it may be said, certain natural impulses, and these incite me to live a life that is in all respects opposed to the life of reason. It is only by rising entirely above my impulses and acting purely from the law of reason that I can be moral.

Now, this view manifestly implies that it is possible, on the one hand, to act purely from natural impulse, and, on the other hand, to act purely from reason. But before we can accept such an absolute opposition of Desire and Reason, we must be sure that the opposition exists. Is it then true that man ever does, or ever can, act from mere impulse as distinguished from reason?

What has led to the view that man may act purely from immediate impulse? It seems to be established by the actual facts of human life. Each of us seems to be an individual object among other objects, possessing by nature certain immediate desires which are brought into play by the stimulation of external things. Thus the immediate appetites of hunger and thirst seem to belong to our animal nature, and to present themselves in our consciousness whether we will or no. These appetites take the form of the feeling of a want, and this feeling

leads to the impulse to satisfy the want. We find that they can be satisfied by certain acts—the acts of eating and drinking, and, impelled by our natural craving, we perform the acts required. Here, it is said, is an impulse with which nature has endowed us, giving rise to an action. It is not reason that supplies the motive to the action, but an impulse of nature. Our reason may show us the means by which the natural want may be satisfied—it may tell us that hunger can be satisfied only by food, and thirst by drink—but it cannot supply the impulse to act, the motive or active power that produces the action. Nor is it different, it may be said, in the case of the desires that we are accustomed to call higher. Thus man has a benevolent impulse, an impulse to do actions that bring pleasure to others. But, like the appetites of hunger and thirst, that impulse springs up in him because he is by nature endowed with a susceptibility which makes him shrink from pain, and causes him to act so as to prevent others from feeling it. To this the Darwinian would add, that the benevolent impulse has come to man by inheritance from his animal progenitors, and is therefore as purely natural as the appetite of hunger or of thirst. Let the benevolent impulse be in a man stronger than the selfish impulse, and he will inevitably perform benevolent acts.

Now, plausible as this view of natural desire is, I think it may be shown to rest upon an imperfect apprehension of the nature of desire as it exists in man. It is supposed that man knows himself simply as an individual object, possessing like other individual objects certain properties which are revealed *in* his consciousness, but which are in no way determined as to their nature *by* his consciousness.

Just as a material thing possesses the tendency to gravitate towards other material things, so man possesses by nature such tendencies to action as hunger, thirst, and benevolence. Accordingly, it is supposed that his consciousness of himself is simply the consciousness that he exists, and is determined now by one impulse, now by another. The immediate impulse is in no way affected by man's consciousness of it, for his consciousness only tells him that he is and must be affected by the impulse:

> "O who can hold a fire in his hand,
> By thinking on the frosty Caucasus."[1]

Thus the consciousness of self seems to be merely the apprehension of a sensitive content, that leaves the content unchanged. From this point of view, the only difference between a merely sensitive and a conscious subject is that the former possesses a certain impulse without being aware of possessing it, while the latter not only has the impulse but knows that he has it. The presence of consciousness, however, seems to leave the impulse just what it was before. If a magnet were to become conscious of its tendency to turn towards the pole, it would be in an analogous condition to a self-conscious being that has become aware of itself as having natural impulses.

Now this account of the consciousness of self leaves out all that is characteristic of it. We are to suppose that the subject can be conscious of being in a particular state of desire, without being conscious of anything else; in other words, that the self-conscious subject is aware of himself only in the individual states which in succession occur to him. We must further suppose that the subject can be conscious

[1] *Richard II.* i. 3.

of himself as particular without being conscious of himself as universal. But neither of these assumptions can be admitted to be true. (*a*) If my consciousness of myself as in a particular state of desire—say, desire for food—were the consciousness only of *this* desire, I should not be able to think of myself as capable of *many* desires. Tied down to each desire as it arose, I should be continually varying in my desires as from time to time they arose in me, but I should not be aware of this variable character of myself. To be aware of hunger as a desire to which I am subject, I must therefore be able to compare it with the other desires of which I am susceptible. But this means that I am conscious of myself as a being in whom a *conflict* of desires may take place. For instance, the desire for food may come into conflict with the desire for knowledge. The consciousness of desire thus implies that the subject appears to himself as an object capable of experiencing various desires which may or may not be harmonious with one another. (*b*) This consciousness leads to another form of consciousness. I cannot be conscious of myself as capable of having a variety of desires, without conceiving of myself as *not* identical with any one of them, or even with the whole of them taken together. Thus arises the consciousness of self as a subject that is opposed to the self as an object with its varying desires. The very consciousness of self as an object lifts the self above its mere objectivity. Hence arises the opposition between myself as a being striving after complete satisfaction and myself as a being experiencing from time to time the satisfaction of particular desires, but never completely satisfied.

Self-consciousness thus involves a primary opposition between an ideal self and an actual self. But this oppo-

sition is not absolute. When I have become aware that I have many desires, all of which seek for satisfaction, my action is not determined by any desire as such. I set before my consciousness the idea of myself as seeking satisfaction in different desires, and I select among them that which seems to have the strongest claim to satisfaction under given conditions. It is not the desire that determines my choice, but *I* who compare the various desires with one another. Having made my choice I *will* to follow the line of action calculated, or apparently calculated, to secure the end in view. Thus the self-conscious subject is not the passive subject of this or that desire, but he determines himself to follow the object to which a particular desire points.

But there is more than this. If I seek for satisfaction in willing the object of a particular desire, I am seeking for satisfaction in that which cannot possibly yield it. For my consciousness of myself is the consciousness of a self that strives after *infinite* satisfaction. I desire satisfaction not for this side of my nature or for that—not for the present moment only but for all time—and no particular satisfaction can possibly yield complete satisfaction. "Man's unhappiness," says Carlyle,[1] "comes of his Greatness; it is because there is an Infinite in him, which with all his cunning he cannot quite bury under the Finite. Will the whole Finance Ministers and Upholsterers and Confectioners of modern Europe undertake in joint-stock company, to make one Shoeblack *happy*? They cannot accomplish it, above an hour or two; for the Shoeblack also has a Soul quite other than his Stomach; and would require, if you consider it, for

[1] *Sartor Resartus*, p. 131.

his permanent satisfaction and saturation, simply this allotment, no more, and no less: God's infinite Universe altogether to himself, therein to enjoy infinitely, and fill every wish as fast as it rose." Thus arises a division in consciousness between the particular and the universal self. On the one hand, I can realize myself only in willing some particular object; on the other hand, in willing a particular object I have not gained the satisfaction at which I aimed. Here then is the origin of the war of flesh and spirit, the actual and the ideal self. Our self-conscious life seems to be in irreconcilable antagonism with itself. Observe, however, that the antagonism is now seen to be, not between natural desire impelling us to actions that lie outside of our own will, and reason as setting up an ideal beyond all desire; but it is between that form of self-determination which seeks to realize the self in willing a particular object, and that form of self-determination which seeks to realize the self completely. It is a conflict of the subject with himself, not a conflict between external force and will.

Yet the conflict seems to remain. Is there no way of reconciling it? There is one method which has commended itself to many moralists, the method of Asceticism. The only way, it is held, in which man can attain the end of his being is by refusing to be influenced in the smallest degree by his desires, *i.e.*, by the satisfactions which seem to be held out to him by willing one side of his nature. For the true nature of man is reason, and reason demands the complete liberation of man from all the passions that enslave him. Thus it was held by the ancient Stoics, as it has been held in modern times by Kant, that morality consists in acting purely from

the law of reason, as distinguished from the law of desire.

This law of reason seemed to the Stoics to be in complete antagonism to the law of desire. Hence they maintained that we can only live the true life of man by being absolutely indifferent to the solicitations of desire; we must "dwell with ourselves,"[1] and treat all the imagined satisfactions of the particular desires as inconsistent with "our being's end and aim." The passions are "unnatural," for man's real nature is not passion but reason. "Follow nature" therefore means, "follow reason." The man who is moved by the desire for wealth is a slave; he becomes free by learning to despise wealth. To be ambitious is to yield to a desire which never can bring satisfaction, but which, on the contrary, must lead to all sorts of dissatisfaction and even to despair; the wise man holds himself aloof from all the ambitions of ordinary men. The end of life is to reach the state of self-harmony, or complete indifference (ἀταραξία) to the claims of the particular self. Passion as foreign to the true self must be destroyed; we must as rational beings devote ourselves to the task of expelling this unwelcome guest. Hence morality consists in the negation of passion. The asceticism of the Stoics thus results from their conception of the particular desires as essentially irrational. Accordingly, the morality they teach is purely *negative* in its character. They tell us, indeed, that we are to live the life of reason; but when we ask wherein the life of reason consists, the answer we get is, that it consists in the annihilation in ourselves of the power over us of all the desires.

What is the value of this conception of morality?

[1] *Tecum habita et noris, quam sit tibi curta supellex.*—PERSIUS.

(*a*) Its main value lies in this, that man in his ideal or perfect nature is something more and higher than the particular forms in which he seeks to realize himself. If I try to realize myself completely in devoting myself to the pursuit of wealth, or honour, or knowledge, I am treating myself as if my whole nature were capable of being expressed in each of these desires. Nay, if I try to find satisfaction in the realization of all my particular desires, I equally assume that I can be identified with these, and that if I can only obtain wealth and honour and knowledge I shall have reached complete self-satisfaction. In neither of these ways can the satisfaction that is sought be attained. Suppose that I succeed in satisfying my desire for wealth, I become conscious that I have left unsatisfied my natural desire for honour and knowledge; if I were to obtain the satisfaction of the desire for honour or knowledge, I should leave unsatisfied the desire for wealth. The truth, however, is, that no desire ever can be completely satisfied. The man who seeks to obtain wealth as the means of self-satisfaction never reaches a point where he can say: Now I have obtained all the wealth that I can possibly desire. For the desire has no limit in itself, and therefore no limited object can satisfy it.

To suppose, therefore, that any one who makes the satisfaction of all his desires his object can ever attain the satisfaction he seeks, is to suppose that the desire for the infinite can be fed by the finite. The Stoics were therefore right in maintaining that the true end of life cannot be realized by making the objects of particular desires the object aimed at. He who takes the particular as the end will learn by the stern logic of experience

that he has been seeking to allay his hunger for the infinite by feeding himself on the husks of the finite. It was therefore natural for the Stoics to say: Give up the effort to find satisfaction in the finite, and learn to be indifferent to the allurements of the passions: if you learn the lesson of indifference to the fascinations of desire, you will no longer be the slave of the passions, but the free man of reason.

But (*b*) the difficulty immediately presents itself, that if man must in no case be influenced by the desire for some special form of self-satisfaction, all motive to action seems to be taken away. Reason sets before me the idea of myself as completely satisfied, and this complete satisfaction is not to be found by seeking to secure any definite object. I am *not* to be actuated by the love of wealth, or honour, or knowledge. In the absence of such motives, how am I to act? Every action must take the form of a volition to realize some particular object. There is no perfectly general action: all action is particular. If I exclude all particular forms of action, nothing remains but the general capacity of acting, and so long as there is nothing but the capacity, there is no realization of the self. Thus the idea of the perfect self remains a mere idea: something that *ought* to be realized, but which never *is* realized. Man's actual self and his ideal self remain for ever apart. His *duty* is to realize the ideal self, but the idea of duty remains a mere idea, because there is no particular line of action that can be followed which does not re-introduce the conception of a particular object to be attained, and so destroys the determination by the abstract idea.

How, then, are we to get beyond the abstract idea of

duty to the consciousness of particular duties? Obviously, only if the idea of self as infinite or perfect is not in irreconcilable antagonism to the idea of self as finite or particular. We must be prepared to show, in other words, that the law of reason is not the abstract opposite of the law of desire, but is in some sense the same law.

Now, observe that the reconciliation of desire and reason cannot be made by saying that the "natural law" of desire must be extended to the "spiritual world." So long as the natural desires are conceived as desires for a particular form of self-satisfaction, so long they must be opposed to the idea of complete self-satisfaction. But the desires are in reality not merely desires for particular satisfactions. To the individual they may seem so, because he has not become aware of what their true meaning is. The man who seeks his satisfaction in the attainment of wealth may have no clear consciousness that the real motive of his action is not the attainment of wealth, but the attainment of self-satisfaction by means of the attainment of wealth. This is implied in the very nature of desire. Why does a man seek wealth? If he supposed that in attaining it he would only bring to himself dissatisfaction, would he not, instead of seeking it, shun it by all means in his power? He desires wealth because he conceives of it as the means of securing many forms of satisfaction—food, shelter, comfort, luxuries, social consideration. The real motive which is operative in the search for wealth is the desire for permanent self-satisfaction. Why, then, is self-satisfaction not found in this way? It is not found because the man has identified his ultimate good with that which is not his ultimate

good. He has sought for the satisfaction of his ideal self in a self that falls short of the ideal. The opposition which is felt in the contrast of desire and attainment is just the man coming to the consciousness of the discrepancy between the ideal as it has actually presented itself to him in his search for wealth, and a higher ideal that was not explicitly before his consciousness. He *supposed* that he was actuated simply by the desire for satisfaction by means of wealth, when *in reality* he was blindly seeking for the complete satisfaction of his nature. When he becomes aware of the disharmony between the self-satisfaction he has been seeking and the self-satisfaction that is still unrealized, he comes to the consciousness that there is a higher than his actual self: that the self he has been seeking to realize is not his true self. Thus he awakens to the consciousness of what he *ought* to be as distinguished from what he *is*, and he opposes the law of *duty* to the law of *inclination*.

Now, it is at this point that there is danger of misinterpreting the meaning of this higher consciousness. In the first consciousness of a higher life, a man is apt to say to himself: "I have been all wrong in seeking my good in such objects as wealth, or honour, or knowledge; henceforth I will give up the search for satisfaction in these, and live only for my higher self." This is a movement of the human spirit of which we are continually seeing examples, though it is seldom that we see it in its purity. A man who has passed the greater part of his life in the acquisition of wealth comes to the consciousness of a higher law, and, looking back upon his past life, he condemns it as unspiritual. "The pursuit of wealth," he says to himself, "is unworthy of man, and is antagonistic

with my true nature. Henceforth I will lead a higher life." But, as a rule, he does not interpret this thought into action, and surrender the wealth he has acquired; at the most, he contents himself with giving away a part of it, reserving the largest part for himself. Sometimes we find examples of a much bolder practical idealism. Thus, in the middle ages, we find men like St. Francis, who carry out to its logical issue the principle of renunciation. "All the desires," they say, "are essentially unspiritual, and must be crucified." Hence they devote themselves to a life of poverty, celibacy, and obedience, renouncing for ever all those objects of satisfaction to which men ordinarily devote themselves. In such men we have in its purest form the realization of the negative conception of duty.

Can we accept this ideal of life as the highest? Is renunciation the last word of morality? If we consider more particularly the relations of desire and reason, duty and inclination, we shall be forced, I think, to hold that the path of renunciation is not the path that leads to the highest spiritual life.

In all his desires, as we have seen, man is unconsciously striving after complete self-realization or self-satisfaction. So long as he seeks for self-satisfaction in a particular object, he is laying up for himself inevitable disappointment. But it does not follow that he is therefore to seek for self-satisfaction in separating himself from all particular interests. To act on this principle is to assume that these interests are necessarily antagonistic to the higher interests of man; it is, in other words, to assume that desire and reason are mutually antagonistic. Now, if we examine carefully any of the special desires, we

shall find that they are not the opposite of reason, but simply reason in the form of unreason.

Desire in its most immediate form appears as *appetite*, the desire for the satisfaction of the wants of our animal nature. It must, however, be observed that the appetites are not simply animal impulses. If they were merely animal impulses, they would not enter into our conscious life. When I become conscious of an appetite, I become conscious of myself as a being who is capable of seeking for the satisfaction of myself so far as this particular desire is concerned. What I have before my consciousness is the idea of myself as capable of receiving satisfaction by means of a certain act, the act of eating or drinking. Such desires may take the direct form of a desire for food or drink, or they may take the more complicated form of a desire for the satisfaction of my immediate appetite, together with a repetition of the pleasure that I have experienced in that satisfaction. It is this last form of desire that gives rise to the artificial stimulation of appetite and the various means by which the gratification may be increased. Having once felt the satisfaction attendant upon the gratification of such wants, I am capable of imagining myself as enjoying it even when the animal appetite is not actually felt.

Now, moralists of the ascetic type have no hesitation in rejecting the second form of appetite. Plato, for example, will have no Sicilian cookery in his ideal state: his guardians must live on plain food and discard all dainties of the palate. But most ascetic moralists go still further. Not only must there be no artificial stimulation of the appetites, but even the gratification of the natural desires must be negated as far as possible. The wise man

of the Stoics was indifferent to the satisfaction of his appetites.

Asceticism, however, is not perfectly consistent with itself. Its principle is that the natural desires should be negated because they are inconsistent with the ideal self of reason. Now, the only way in which a living being can completely get rid of the particular desires which we call the appetites, is by ceasing to live. So long as by eating a man continues to exist, he must be subject to the desire for food, and therefore reason can never absolutely subdue appetite to itself. The negative method of asceticism therefore leads to a practical contradiction. The struggle between reason and desire is an ever-renewed fight in which desire must always triumph, because it is bound up with the very existence of the rational subject. Only by one absolute act of self-renunciation, the renunciation of life itself, could the ascetic put an end to the conflict. Now, this self-contradiction in the ascetic conception of morality suggests the question, whether there is any necessary antagonism between appetite and reason.

It will be found, on reflection, that the assumed opposition is not really between appetite and reason, but between a self that treats appetite as an absolute end and a self that treats it only as a means. Plato had a glimpse of this when he held that his guardians should eat only the plainest food; for he did so mainly because he believed that luxurious living is hostile to the high thinking and self-abnegation required in a leader of the people. That is to say, Plato virtually condemns as irrational, not appetite as such, but appetite which assumes an importance inconsistent with the complete develop-

ment of the man. Now, when we look at the matter from this point of view, we see that the opposition supposed by the ascetic to obtain between appetite and reason, really obtains between a higher and lower conception of the self. If a man is prepared to sacrifice higher interests to the gratification of his appetites, he acts irrationally, because he substitutes a particular end for a universal. But the immorality of his action does not arise from the fact that he has willed the particular end, but because he has willed it as if it were universal. To realize himself at all, he must will the object indicated by his natural desires; but the difference between willing the object for itself and willing it for a higher end is spiritually an infinite difference. In the one case he practically affirms that *this* particular end—this limited self—is universal; in the other case, that this particular end is particular. Or, as we may also put it, in the former case he particularizes the universal; in the latter case, he universalizes the particular. Now, in this universalizing of the particular morality consists. The path to the higher spiritual life cannot be found by negating desire, but by transforming it. Duty does not consist in the destruction of natural inclination, but in subordinating it to the realization of the complete nature of the self. The negative method does not enable the individual to triumph over his appetites, but raises appetite to a bad preëminence. St. Anthony, fasting until he is haunted by spectres of the imagination, gives to appetite an importance that it would not otherwise possess. When, on the other hand, it is recognized that the appetites are means of realizing higher ends, it is seen that their satisfaction is not merely permissible but a duty. It is a

duty to maintain life, and to maintain it in its highest perfection, because the maintenance of life is essential to the development of the higher self. It is quite true that even the sacrifice of life may be a duty. But it is never a duty unless its maintenance comes into conflict with a higher duty, as when a man betrays his country to save his own life. The same principle which in the one case makes it a duty to maintain life, in the other makes it a duty to sacrifice life: the principle that only in the realization of the ideal self can man realize his real self.

We see, then, that duty may be defined as the realization of the universal through the particular; or, in other words, the identification of the actual self with the ideal self by a particular determination of it. All false theories neglect one of these aspects. Hedonism neglects the universal or the ideal self. Asceticism neglects the particular or the actual self. The former says that duty is simply determination by the particular, *i.e.*, by immediate desire; the latter affirms that duty is direct identification with the universal. The one does not explain the conception of duty at all, since a self that is determined by particular desires has no conception of duty; the other allows for the conception of duty, but does not explain how it can be realized. The truth therefore is, that duty is at once the willing of the universal or law, and the willing of the particular. My duty is to realize my ideal self, but my ideal self is the actual self as willing a particular object which I identify with the law. Thus the law gets a definite content, without ceasing to be a law.

KANT'S VIEW OF DUTY.

These somewhat abstract statements will be better understood if we consider the ethical theory of Kant. For in Kant we find the two sides of morality—the particular and the universal—clearly brought out, although they are not perfectly reconciled.

What is meant by duty? asks Kant. To do one's duty is to act independently of any natural inclination for or against the course pursued. We do not say that a man of abundant vital energy acts from a sense of *duty* when he does from *inclination* those things that tend to maintain his own life. It is a duty to maintain one's life, but it is not done *as* a duty when it is maintained because the agent has a natural pleasure in maintaining it. Self-preservation is made a duty only if I maintain my life because I *ought* to do it, not because I *desire* to do it.

Kant maintains, then, that duty implies two things: (1) an absolute law or standard of action; (2) self-determination by this absolute law. In other words, the law and the law alone must be the *motive* of action. An action is moral quite independently of whether the object aimed at is secured or not. The man who prolongs his life because he loves it, attains the same object as the man who prolongs his life because it is his duty to do so. On the other hand, there are many men who are actuated by a strong sense of their duty to their fellows, whose benevolent efforts always prove unsuccessful, through some lack of those gifts that lead to success. But our estimate of the moral character of such men is not lowered because they are unsuccessful in the accomplishment of the object aimed at; we say that they

did their duty, and are therefore morally on as high a level as if they had succeeded. It is the *motive* that makes a man good, not the *object* sought.

There are, then, two absolutely discrepant kinds of motive. In the first place, the motive may be the natural desire for a certain object which appears to me as pleasant. The object, *e.g.*, may be the maintenance of my own life, and the motive may be the natural tendency to seek that object. I desire the object, and, desiring it, I do the acts that tend to secure it. In the second place, the motive may be, not desire for the object, but *reverence for the law*. Here it is not the object to be attained that constitutes the motive, but my consciousness that I ought to seek to attain it. I have no reverence for the maintenance of life; what I reverence is the law that commands me to maintain my life. When I become conscious that there is an absolute law which has no respect for my inclination either to maintain my life or to get rid of it, I am impressed by the majesty of the law, and I may act out of pure reverence for it. Then my action is moral. My only motive is reverence for the law itself. To do one's duty, then, is to recognize the absolute obligation of the law over every rational being, and to will the law purely because I reverence it.

In further enforcing this view, Kant goes on to contend that all action which is done from desire for a certain object is contrary to duty. (1) If our motive is the desire for a certain object—say, the maintenance of life—it is evident that this object must present itself to us as pleasant. The idea of the continuance of one's life affects our susceptibility to pleasure, and because it

appears as pleasant we desire it. Obviously, therefore, the desire is not something that we can make or unmake. If man were so constituted by nature as to be excited to pain on the presentation of the idea of the continuance of his life, he would desire death instead of life. In point of fact there are cases in which a man is so miserable, that the idea of life appears as painful, and he desires death. Desire is thus determined by the action of the object on the natural susceptibility to pleasure and pain. Having once experienced that a certain object produces pleasure, the individual may formulate for himself a rule of action based upon that experience. Thus he may say: "Seek to maintain life, because it brings pleasure." But this is obviously not an absolute law. If by further experience a man finds that life is not pleasant, he may formulate a new rule of action: "Seek the destruction of life, because it is painful." No absolute law can be based upon desire, because desire is not a fixed principle, but is dependent upon the fluctuations of feeling as determined by changing experience.

(2) There are many desires corresponding to the different objects that may be experienced as pleasant. Hence there are many rules of action. But they all agree in this, that they are based upon the desire for pleasure. Nor does it make any difference what the source of the desire may be, whether in the senses or in the intellect. All desires are of the same kind, because all depend upon the susceptibility of the subject for pleasure in the idea of an object. The desire may be a desire for knowledge, but the motive in this case as in others is the pleasure attendant upon the attain-

ment of the object. Now, if this is true, it follows that a life which is ruled by desire is a life that rests upon mere rules of experience. Such a life presents itself to the individual seeking it as happiness; for by happiness is meant a life of continuous pleasure.

(3) Man from his very nature as a finite rational being must desire happiness. For he is necessarily susceptible to the desire for pleasure, and his reason shows him that all his desires are aiming at pleasure. As finite, he must seek for happiness not in himself but in objects without himself. He cannot at first tell, however, *what* objects his desires aim at; these he must learn from experience, *i.e.*, from a knowledge of their effect upon his peculiar susceptibility. Plainly, therefore, no universal principle of action can be based upon the desire for happiness. We cannot say: Wealth should be sought as a means to happiness, because a man may not be susceptible to the desire for wealth The idea of happiness is merely a name that we apply to all forms of desire for pleasure; it cannot tell us how we are to act in any given case. "Seek happiness" is no guide to conduct. For, when we ask, what then *is* happiness, no answer can be given except that happiness is what each man from time to time desires; and, as different men have different desires, and even the same man at different times, happiness cannot be reduced to law. To this Kant adds, that even if all men were susceptible to the same desires, no *universal* law could be based upon desire, but only a general principle of human action. A law that rests upon the susceptibility to pleasure peculiar to man as a *finite* being cannot be an *absolute* law binding upon all rational beings.

If, then, there are *universal* laws of action—laws bind-

ing upon every rational being—they must rest upon the mere idea of duty, not upon desire. An action can be moral only if I am in no way influenced by my desire for an object as pleasurable, but do it purely and solely because it is rational. And it can be rational only if it can be conceived as an act that every rational being is called upon to perform. The test of a moral law is therefore this: Can I view the proposed rule of action as applicable to all, and not simply to myself with my peculiar susceptibilities for certain pleasures? Is the principle, in other words, when it is viewed as a rule for all, consistent with itself? If it is, it must be a universal law, since it holds good quite apart from the varying desires of the individual subject; if it is not, it cannot be a universal law, but, at the most, only a rule of expediency. Kant expresses this idea by saying, that a moral act is one in which we determine ourselves purely by the *form* of a law, not by its *matter*. Take, for example, the principle, "Respect the property of others." If this means: Respect the property of others, because in this way you will get more pleasure, it is not a law, because some men get more pleasure from dishonesty. But if it means: Respect the property of others, because theft cannot be made a universal principle, and is therefore contrary to reason, we get a universal law.

The form in which Kant has stated his doctrine is open to grave objections.

(1) He maintains that in acting morally we must be absolutely uninfluenced by desire, because all desire is excited by the idea of pleasure, or, what is the same thing, by the idea of an object as fitted to bring pleasure.

But, if we exclude all objects of desire, how are we to act at all? I am *not* to act from the desire for wealth, or honour, or knowledge; what then am I to do? If there is no definite object to be sought, am I not reduced to the condition of acting without having the idea of any positive direction that my action is to take? Kant answers that I can examine different courses of action, and finding out which can be practised by every one, and which cannot be practised by every one, I can set up the former as a law binding upon me because it is the only kind of principle that is consistent with itself. But if I had no desire for any object in particular, how could I get out of the idea of law in general any guide for action, any specific duty? Suppose that I have no desire for life, how is it possible to arrive at the principle that the maintenance of life is a principle that is consistent with itself? Unless I had the desire for life, the question would never arise, whether it is right or wrong to preserve life. Kant, therefore, must fall back upon desire to get the particular principles from which we are to act. All that he shows is, that, *when* particular objects of desire are presented before the mind, we can determine which are right by asking whether we can suppose them to be sought by all without contradiction, while others are wrong because we cannot suppose them to be sought by all without contradiction. But if this is so, how can it be said that we act *purely* from the idea of law? Do we not rather act from the idea of a certain object which is conceived as a law for all? "Act from the idea of law" supplies no principle of action in any given case, unless we fall back upon some object supplied by desire.

(2) It may be objected that, even if we suppose different courses of action to be suggested by our desires, we cannot tell how we should act in any given case. Kant thinks that certain courses of action can be shown to be wrong because they are incompatible with the very idea of law. Universal stealing, he says, is self-contradictory, because if everyone stole there would be nothing to steal. But the contradiction does not arise from the mere universalizing of the act, but from attempting to universalize what is self-contradictory *before* it is universalized. Theft is a contradiction because it recognizes the right of property, but acts contrary to the recognition. Every act of theft is a contradiction of the right of property. The contradiction does not arise, as Kant supposes, only when theft is universalized, but from the very idea of theft. If there were only *one* act of theft it would be self-contradictory, that is, the idea of theft presupposes the right of private property. Unless, therefore, we start from the principle, that the right of private property must be recognized as a principle of action, we get no contradiction by supposing theft to be universalized. Suppose, *e.g.*, a community which, resting upon a purely socialistic foundation, does not recognize any right of property; would theft in that case be self-contradictory? It would only be self-contradictory in the sense of being impossible; for where there is no property there can be no theft. Plainly, therefore, we can find a contradiction in the idea of theft only if we assume the absoluteness of private property. But the mere *universalizing* of an act gives no criterion of action. "Let everyone use what does not belong to him" is the universalized principle of a communistic form of society; "Let no one use what does not belong to him" is the

universalized principle in a non-communistic form of society. Manifestly, therefore, we can get no criterion of morality by simply universalizing a suggested rule of action. If a rule cannot be shown to be right in itself, it will not be proved right by merely supposing it to be universally acted upon.

(3) Another objection to Kant's doctrine that has been made is, that it assumes particular rules of action to be absolute, *i.e.*, to admit of no exception. Now, this leads to all the difficulties of casuistry. If there are a number of rules, each of which admits of no exception, we involve ourselves in self-contradiction. If the command, "Thou shalt not steal," is to be taken as absolute, circumstances may arise in which it comes into collision with the command, "Thou shalt not kill." If in a famine those who have food in store stand upon their right of property, the majority of the people may starve, *i.e.*, in maintaining the right of property, the higher right of life is sacrificed. Now Kant's formal principle, that a rule of action is to be judged as moral by its capability of being universalized, implies that no exception can be allowed to its application; for, if it is once admitted that the rule is not in all cases such that its violation is a contradiction, the whole principle of determining a moral law by universalizing it goes to the ground.

The objections just made must be held as valid against the letter of Kant's ethical theory. But it may be shown that there is in his doctrine a deeper truth which does not find expression in the formal principle of self-consistency.

Kant points out that it is one thing to be subject to law, and another thing to act from the *consciousness* of law. Unless there is a *consciousness* of law there can be no *will*.

The "mere animal" is subject entirely to the law of its desires, and therefore it has no will. Now, we can conceive of a being who in all cases acts in accordance with the laws of reason, *i.e.*, a being whose will is always *good*, because never deflected from the path of morality by the influence of desire. Man, however, is not a being of that kind. He is capable of being moved to action by natural desire, and therefore there is in his nature a conflict between the law of desire and the law of reason. Hence it is that he presents before himself the law of reason, not as a law that belongs to his very nature, but as a law that he may or may not obey, but which he *ought* to obey. It is because he may *not* act from reason, but from desire, that the moral law presents itself to man in the form of an *imperative.*

What, then, is the nature of this imperative? It commands categorically or absolutely, *i.e.*, it says that an act must be done because its opposite contradicts the very idea of law. Hence it may be thus expressed: "Act in such a way that, in willing to act, you can will that the maxim of your act should become a universal law." "Act as if by your will the maxim of your act were about to be made into a universal law of nature."

Now, we may distinguish between (1) duties of perfect obligation and (2) duties of imperfect obligation.

(1) Suppose that a man is tempted to borrow money, under promise to repay, knowing quite well that he cannot fulfil his promise. He asks himself whether the maxim, "Promise what you know you cannot perform," could become a law for all, and he sees at once that if everyone promised without intending to fulfil his promise, nothing would be promised, since no one would believe

another. The universalizing of a false promise thus contradicts the very idea of a promise.

(2) As an instance of a duty of imperfect obligation, take the case of a man who refuses to help others who are in need. If the maxim, "Give no help to others," is to be regarded as if it were a law of nature, a man must deprive himself of all hope of assistance even when he needs the sympathy of others, and this is a contradiction. Here we wish a maxim to hold only for ourselves, and not for others; we affirm that there is a law, only it is not a law for us: and this is an irrational position. Every law is universally applicable.

This formula is open to the objections already made. It affords no real criterion of action, and it assumes the principles which it pretends to derive. But Kant has a second formula which comes much nearer the truth. The formula is this: "Always treat humanity, both in your own person, and in the person of others, as an end and never merely as a means."

Here Kant has introduced the new idea of man as an end to himself. In the first formula Kant held that we must exclude all motives that imply any relation to an object or *end*, because such motives are simply forms of natural desire for individual satisfaction; in the new formula, he admits that we can have a certain end or object in view, only it is not a particular end, but the conception of the self as an end to itself. Each individual is now conceived as a *person*, *i.e.*, as a being having a will, and therefore as distinct from a *thing*.

But the conception of the individual as an end to himself does not of itself explain how there can be any particular duties. The self is conceived of as a self that

is opposed to all the particular desires of the self, and therefore it remains abstract. I am to realize myself, but I am to do so independently of all desire; but, independently of all desire, there is no particular way in which my self can be realized.

Kant, however, has a third formula which comes still nearer the truth: "Act in conformity with the idea that the will of every rational being is a will that lays down universal laws."

Here we have the conception of a social community of beings, each of which is at once end and means; we have, in other words, the idea of humanity as a self-conscious organism. The formula includes the two ideas of (*a*) universal law and (*b*) the consciousness of that law as identical with the consciousness of oneself as an end which belongs to one as a rational being. Hence we get the idea that, in obeying the universal law, man is obeying a law that his own reason prescribes. This is the principle of the autonomy of the will, the principle that in submitting to universal law man is submitting to his real self.

But while Kant holds that we must conceive ourselves as in idea belonging to the social organism, he will not admit that this is more than an *ideal*. For man never gets beyond the influence of his particular desires, and therefore he can never realize the ideal.

We have now before us the ultimate form in which Kant conceives of morality, and we must ask how far his opposition of the ideal and the real can be maintained.

What prevents Kant from holding that the conception of men as members of a social organism is a statement of the actual nature of man? Manifestly, his doctrine

that men as the subjects of desire contain in their nature an element which prevents them from ever realizing the ideal which reason sets before them. Is it true, then, that desire is of such a nature that it is incompatible with the rational ideal?

Kant's view is, that all the desires are desires for pleasure, and that happiness is simply the idea of the subject as having none of his desires for pleasure unsatisfied. Can we admit that every desire is a desire for pleasure?

(*a*) A desire *for* pleasure is not the same thing as a feeling *of* pleasure. If I *desire* the pleasure of music, I am not yet in the condition of *experiencing* the pleasure. Before I experience it I must therefore set before my consciousness the idea of the pleasure to be experienced from the music. There are here obviously three things involved: *Firstly*, what is desired is a particular pleasure, the pleasure of music. The desire takes its special character and its power of attraction from the special character of the pleasure conceived. In other words, there is a certain *object* or *end* which I set before my consciousness as desirable. *Secondly*, not only must there be a certain object conceived as desirable, but it is an object conceived as desirable for *me*. Not every one regards music, or, at least, certain kinds of music, as fitted to bring pleasure, but only one who conceives of music as bound up with his own satisfaction. In the desire for pleasure there is therefore implied the distinction of the self desiring from the object desired. Unless the subject distinguished the object desired from himself, there could be no desire *for* the object, there would merely be an occurrence of a state of pleasure, without any consciousness either of an object as such or a subject as such. *Thirdly*, the pleasure

which is desired must be distinguished both from the object and from the subject. If the desire is *for* pleasure, it must be possible to separate in thought between the object which is to bring the pleasure, and the subject who is to be pleased.

Now, it must be observed that all the three elements mentioned are essential to what is called the desire for pleasure. But, if so, obviously it is an imperfect statement of what is involved in desire to say simply that it is a desire for *pleasure*. If the desire were purely for pleasure, it might arise without any consciousness either of an *object* in which pleasure is placed, or of a subject to be pleased. But the former is impossible, because pleasure is necessarily not pleasure in general, but a particular kind of pleasure. I desire the pleasure of music, or knowledge, or power, but I never desire pleasure as such. A desire for pleasure in general would lead to nothing, because it would give no direction to my activity. The desire for pleasure therefore involves the desire for a certain object conceived as pleasurable. Take away the object and you destroy the desire. Equally impossible is the desire for pleasure apart from the idea of the self as the subject to be pleased. For there can be no conception of an object as pleasure-giving, unless the object is conceived as pleasant to the subject desiring it. If the object were not conceived as fitted to bring pleasure to *me*, it would have no effect upon my activity. I may think of music as an object in which another takes pleasure, but music is not in that case desired by me. What is called the desire for pleasure is therefore in reality the *conception of myself as a being whose nature it is to obtain pleasure in a certain object.* I must identify myself in thought with the object before

I can desire it. There is therefore no possibility of realizing myself without realizing the object; and no possibility of feeling myself realized except in the realization of the object. In other words, what is called the "desire for pleasure" is really the conception on the part of the subject of one of the ways in which by attaining an object, he at the same time has the feeling of a harmony of his individual self with itself and with the world. As Aristotle points out, pleasure is just the feeling of satisfaction which accompanies the active realization of the self in relation to external circumstances.

If this is a correct analysis of desire, we cannot admit what Kant maintains, that desire for an object is desire for pleasure. It is not desire for pleasure simply as pleasure, but desire for an object conceived of as good because conceived of as a means of realizing the self. In realizing myself in the experience of a certain object I no doubt experience pleasure, but what I am in search of is not the experience of pleasure but the good of which the experienced pleasure is a sign or index. Now, Kant assumes that the realization of the self can take place only if the self sets before itself an end which it wills irrespective of all desire for an object. But (1) there is no end that can be realized apart from desire for an object. Unless some object is desired, the self must remain unrealized, because a self in general is not capable of being realized, and a self that is to be realized must be conceived as realizing itself in some particular way, *i.e.*, as desiring an object. (2) There is no reason to exclude all desire for objects, when we see that desire is just the idea of the self as realizing itself in objects. Such realization must be conceived as pleasurable, be-

cause pleasure is simply the feeling of satisfaction in the realization of oneself. Every realization of the self is its realization in a certain way, *i.e.*, it consists in self-identification with an object conceived as desirable, and therefore as pleasurable. There is therefore no reason to oppose the law of reason to the law of desire, as if the former absolutely excluded the latter. What reason prescribes is the realization of the self, and, as such realization is impossible apart from the desire for realization in objects, the distinction must lie, not in the presence of an object in the one case, and in its absence in the other, but in the *character of the object* which is desired.

The question of morality therefore takes this form: What is the distinguishing characteristic of the object that we *ought* to desire? There are objects that we desire which are not those which we ought to desire: can we state the distinction between what *ought* and what *ought not* to be desired?

Now, Kant has himself pointed out, that to be moral is to act as if we belonged to a "kingdom of ends"; in other words, each individual must conceive of himself as a member in a social organism. In this conception of the individual as a member of a community the distinctive mark of moral action must be sought. It may, in fact, be shown historically that out of this consciousness of the unity of himself with others the consciousness of morality has sprung; and that the development of the moral consciousness has arisen from the ever clearer consciousness of the unity of each with all.

At first this consciousness is very imperfectly developed. In purely savage life it takes the form of submission from terror to a superior force. But even in this imperfect

form, there is implied the recognition of a law superior to the caprice of individuals. For, in submitting to one who is superior to himself in courage and contempt of life, the savage recognizes that there is something higher than his merely individual self. Thus there arises some sort of social order. The higher self is still supposed to be embodied in the chief who, by despising the natural desire for life, shows that he has an idea of himself that goes beyond the first immediate promptings of desire. In submitting to his chief the savage thus submits to a higher ideal of himself; for in the chief he finds exhibited characteristics that he recognizes as superior to his own. No doubt the form which the moral consciousness here takes is inadequate to the idea. The savage recognizes a higher self, but he does not identify himself with it, but conceives of it as something foreign to himself, something which is for him unattainable. And, on the other hand, the chief, while he has a higher ideal of himself and prefers this to the lower self of immediate desire, yet does not recognize that he is acting from a law of reason. The consequence is that, while he acts as a moralizing agent by forcing upon others the consciousness of a higher self, he is not himself aware that it is as the embodiment of the higher self that he possesses power and authority. Rather, he views himself as possessing influence over others by his natural superiority. Hence he has no proper sense of the limits of his authority. What he desires is a law for his followers, not because he desires a higher good, but simply because he desires it. His action is therefore largely capricious: what he desires seems to him good, not because it is good, but because he desires it. He does not distinguish between what

seems good to him, and what is good because it tends to realize a common good. Yet, if the idea of a common good were not unconsciously at work in him, he would have no authority over others. It is because they recognize that he is guided by a higher law that they recognize his authority even when he is capricious and irrational.

Now, the consciousness of a social good which is at the same time the true good of the individual, a consciousness which is implied even in savage life, is the moving principle in the whole evolution of morality. What holds human beings together in society is this idea of a good higher than merely individual good. Every form of social organization rests upon this tacit recognition of a higher good that is realized in the union of oneself with others. Suppose this entirely absent, and the moral consciousness would be impossible. For the moral consciousness always involves the recognition of a higher than individual good, and, because this higher good is partially realized in social laws and institutions, the individual feels himself constrained by his reason to submit to it. It is by reflection upon this good as realized in outward laws and institutions that the individual becomes conscious of moral law. At first, law seems to be externally imposed, but the individual in reflecting upon it recognizes that the real force of the law lies in the fact that it is an expression of his higher self. It is true that in awakening to the consciousness of moral law as deriving its authority from reason, the individual at first asserts that custom and external law have no authority over him; that the sole authority he can rationally obey is the law of his own reason. But this is only one side of the truth; the other side is, that in

custom and law there already is realized the law of reason. No doubt society at any time is only a partial realization of the law of reason, and therefore no form of society is final; but it is none the less true that only in so far as morality realizes itself in society can it be realized at all.

Now, Kant will not admit that morality is actually realized in the community. He criticizes the community by reference to the ideal of a completely rationalized humanity, and he contends that as this must always be an ideal, the individual is forced to seek for the realization of himself not in any actual form of the community, but in an intelligible world which exists for him only as an unrealizable ideal. Man is in idea the member of a community, but it is a community that never has been and never will be realized.

In one sense this conception of an ideal community shows that Kant is in the grasp of the larger consciousness of human life which has come to men through Christianity. The Greek could find in the actual community of which he was a member a realization of his whole self, because for him the community was no wider than his own little State, or, at the most, than the community of States composing Greece. But with the removal of this artificial restriction through Christianity man became conscious that there was a larger self than the State, viz., the community of all men in the life of humanity as a whole. It seems therefore as if no form of the community can possibly be adequate to the ideal community. For humanity has a life wider and more enduring than the narrow and evanescent life of a particular people or nation; and in this all-embracing life the individual can alone find the realization of himself. And as humanity never is com-

pletely realized, it seems true to say, that morality points to an ideal that can never be realized.

Now, there can be no doubt that, in setting up the idea of humanity as the only adequate form of morality, Kant has partially seized a most important truth. If we take any existing form of the State and compare it with the ideal of humanity, we are compelled to say that it is not completely rational. There are possibilities in humanity that cannot even be clearly imagined, not to say actually realized. It is therefore important to take note of the inadequacy of any existing form of the community to the ideal community.

But it must be observed that to be conscious of the incompleteness of existing communities to the perfect community is not to say that morality cannot be realized. Just as knowledge is never *complete* while yet it is *knowledge*, so morality is never *perfect* while yet it is *morality*. And just as the idea of completed knowledge is possible only because we already possess knowledge, so the idea of perfect morality is possible only because man is already moral. Had man not already realized in principle the moral ideal he would not be able to contrast the ideal with the actual. Hence we find that the ideal of morality grows and expands with the evolution of the community. The Greek could imagine that in the form of his civic State he had reached finality, and in this he was wrong; but it is none the less true that but for the moralizing influence of the civic community the conception of a higher form of society would have been impossible. In society man learned to comprehend himself. He learned that in devotion to the common good, and in no other way, could he realize himself. Thus he was able to set the social

ideal against the mere individuality of passion, and in identifying himself with his State he became a moral being. With the Stoics came a perception of the inadequacy of the Greek State to satisfy the ideal man, and therefore the Stoics turned against the existing State, and held that man must be a citizen of the world. In *himself* he seemed to find a higher ideal than was realized in the community of which he was a member. But this only shows that the community as it existed was not completely rational: it does not show that man can realize himself in isolation. Accordingly, the community must assume a higher form. Morality must no longer be identified with the customs and laws of the narrow civic community, but it must rest upon the wider basis of humanity. This is the principle which is tacitly recognized in all modern forms of the community, however inadequately it may be realized. It is still true that only in identifying himself with a social good can the individual realize himself. And the reason is that in the community the idea of humanity as an organic unity is in process of realization. That the community has not reached its final form only shows that the moral life is the gradual realization of the ideal life. It is not true, therefore, that the ideal of humanity is a *mere* ideal: it is an ideal that is continually in process of realization. Hence the individual man can find himself, can become moral, only by contributing his share to its realization. He must learn that, to set aside his individual inclinations and make himself an organ of the community is to be moral, and the only way to be moral. He may criticize, and seek to improve the community, but his criticism must rest upon a recognition of the principle that the individual has no right to oppose himself to the community on the

ground of inclination, but only on the ground that the community as it actually is in some ways contradicts the principle of the community, the principle that it is the medium in which the complete realization of man is to be found. No criticism can be of any value that denies the principle of a social good, and seeks to substitute the mere individualism of caprice.

We may now see wherein the real opposition of what ought to be with what is consists. It does not consist, as Kant assumes, in a contradiction between desire and reason, as if reason were exclusive of desire. Morality may be said to consist in having rational desires. The individual who desires the good of all is not actuated by a mere desire for pleasure: for the good of all is the true principle of human action. In seeking his good in the universal, a man turns against the desire for the good of himself as an isolated being, but he does not negate all desire. His desires now take the form of a desire for what is rational; they are spiritualized, not destroyed. Thus he gets positive content for his desires, while yet the content is not mere individual pleasure. In seeking a universal good, man is seeking for that which must be pleasurable, because pleasure is just the feeling of harmony resulting from the willing of what reason determines as good; but if he seeks for pleasure, instead of good, the pleasure will not be obtained, because he is then attempting to realize himself as a separate individual, *i.e.*, to realize himself as that which he is not. What is called a life of pleasure always turns out to be a life of pain. And this is really a proof of the higher nature of man, because pain and dissatisfaction with self must result from the disharmony between the rational ideal and the irrational

actual. Morality is not a search for pleasure, but morality is the only true pleasure. Thus we can see how the three elements involved in desire are reconciled. The moral *object* of desire is the good, *i.e.*, the good of man, not of individual men; the moral *subject* of desire is the subject who identifies himself with this moral good; and moral *feeling* is the consciousness of harmony enjoyed by the subject who so identifies himself with a universal good.

We have seen what is implied in the idea of duty. By duty is properly meant identification with a universal good that is capable of being realized in a community of self-conscious beings. Now, identification with an ideal good is possible only if the conscious subject is capable of such identification. And hence we have now to ask whether the individual man has such a capacity; in other words, whether he is capable of freedom or self-determination.

CHAPTER X.

MORAL PHILOSOPHY (CONTINUED).

IDEA OF FREEDOM.

THE problem of human freedom springs from the same root as the problem of duty. In our ordinary judgments we say of ourselves or others, "That ought to be done," "That ought not to be done," and we assume in making such judgments that the individual may or may not act in a certain way according as he determines himself, or, in other words, *wills*, to act. But this first assumption of freedom seems to be thrown into doubt when we begin to consider the springs or motives of human conduct. For it may be argued that no action of man can take place without some *motive*, something that excites his activity. And what is a motive, it may be asked, but a particular desire excited by the idea of a certain object? But the desire is determined by the natural susceptibility of the individual, and this again is determined quite independently of the individual. One man is more susceptible to pleasure in the contemplation of a certain object than another. Some are more drawn by pleasures of sense, others by intellectual pleasures, still others by benevolent

pleasures; but these differences have a purely natural basis. Nor does it alter the case if we adopt the point of view of the theory of development, and say that the susceptibility of the individual is the result of inheritance. And not only is each kind of pleasure apparently due to natural susceptibility, but the *quantity* of pleasure is also fixed. Of two men who take pleasure in music, one experiences a greater *degree* of pleasure than the other. It is in fact the degree of pleasure that determines the strength of a motive. If a pleasure of sense is imagined by one man as more intense than a pleasure of intellect, his action will be determined by the pleasure of sense; if a pleasure of intellect is imagined as more intense than a pleasure of sense his action will be determined by the pleasure of intellect. But in the one case as in the other the pleasure whose intensive quantity is greater will determine the act. How then can it be said that there is any freedom of will? There is no possibility of making a pleasure seem greater or less, and therefore no possibility of acting otherwise than we do act. Freedom of will is a dream.

To this it has sometimes been answered that freedom of will is a fundamental fact of consciousness. In acting we are conscious that we act freely. It is further maintained that we are even able to act in opposition to the strongest motive. However pleasant an object may seem to be, we can refuse to be determined by it. This may be shown by the fact that there are cases in which two objects seem equally pleasant, and yet we act. Now, if the quantity of pleasure alone determined the will, in such cases we could not act at all. We should be like the ass of Buridanus which was placed between two bundles

of hay so exactly alike that it starved because there was nothing in either to turn the balance of its desires. But man is of a different texture: in such a case he would decide for one or the other, *i.e.*, he would act without any motive. It is therefore possible to act purely from choice, without being influenced by motives. And this agrees with the fundamental fact of consciousness, the consciousness of our own freedom. We always act freely or from choice. When there are different motives before our minds, we choose that which we prefer. Freedom is the power of choice, the power to act independently of motives.

These two opposite theories show that the problem of freedom is bound up with the question of motives. One school affirms that the strongest motive determines the act, the other maintains that action is determined freely without motives. I think we shall find, however, that neither of these views is true, though both contain an element of truth. The first theory is right in maintaining that we act from motives, wrong in denying that we act freely; the second theory is right in maintaining that we act freely, wrong in denying that we act independently of motives. In other words, motives are essential to freedom, freedom essential to motives. To see this we must inquire into the nature of a "motive."

Both of these theories assume that a motive is a natural susceptibility to pleasure in the idea of an object, and that the degree of such susceptibility is determined independently of the subject. The first view infers from this assumed fact that action is the resultant of a conflict of desires, in which the strongest always prevails; the second view, granting that this would be so if all action were determined by motives, maintains that the subject has

in himself a power of choice which is independent of motives.

We have seen above that in man desire is not a mere susceptibility to pleasure, but the conception of self as capable of satisfaction in a certain object. To be conscious of self is to be beyond all merely external excitation. Nothing can act on the self without the activity of the self. We may see this indirectly by considering what would take place if the desire were merely a natural susceptibility. The self we are to suppose is not self-active, but is the passive recipient of certain impulses. We must suppose, then, that a certain impulse arises from the action of an external stimulus upon the individual. Thus, *e.g.*, when the body requires nourishment, a craving arises of which the subject becomes conscious. But the craving is not due to any activity of the subject. The cause or stimulus is the condition of the body which excites the craving. All that the subject can do is to take note of the craving excited in him by the stimulus. The craving thus becomes a "motive" for the subject, *i.e.*, it acts upon the subject and tends to move him in a certain direction; in other words, to go through the series of movements by which food is supplied to the body for nourishment. To this it may be objected, that the craving for food does not lead to that series of movements until a volition has taken place, and this volition, it may be said, is an activity of the subject. The subject has to will the movements before they can take place. But how, it may be asked, does he come to will the movements? Would any subject will the act of eating if he were not impelled to do so by the natural craving? It is true that the movement must take place before the craving can be

satisfied, but there would be no movement were there no craving. It is therefore the craving which acts upon or excites the subject to act in a particular way. But, it may again be objected, the craving does not of itself lead to the action; on the contrary, the subject, feeling the full force of the craving, may yet refuse to give way to it. Now, if the subject can prevent the craving from issuing in action, he must have an activity of his own. A man, *e.g.*, may prefer to starve rather than give way to the craving of hunger, if he can only satisfy his hunger by theft. "Just so," it is answered, "but he does not refrain from eating in such a case without any motive; he does so because he is acted upon by a stronger motive." The motive, in this case, is the desire for a greater pleasure to himself or others. Either he has a stronger desire for the good opinion of others, or of a Supreme Being; or he has a stronger desire for the well-being of others, *i.e.*, for the greater amount of pleasure which will come to others from his abstinence than from his self-indulgence. Thus there is no free activity of the subject, but only an activity determined by the stronger of the two motives. In fact, when there is no competition of motives, there is no possibility of diverse activity. If a man is acted upon by the craving of hunger alone, he will inevitably do the acts by which the craving may be allayed. It is only when different impulses arise in him that a struggle takes place; and the struggle is not between an impulse on the one hand, and a free activity on the other, but between competing impulses. Which way the man shall act will depend upon the impulse which in him is strongest. If the craving for food is stronger than the desire for approbation or for the general good, he will satisfy his

craving at all hazards; if the reverse, he will not satisfy it; but in both cases the strongest motive must prevail. There is no free activity in either case, *i.e.*, no activity that is independent of the motives acting upon the man. Volition, then, is simply the series of movements which issue from the strongest motive.

The weak point in this explanation is, that it confuses desire with impulse, and volition with a series of mechanical movements. If human action were the immediate connection of impulses and movements, there could be no consciousness of an end, and therefore no desire. For the consciousness of an end is only possible for a being who is lifted by thought out of the flux of feeling, and is able to conceive of himself as the possible subject of various satisfactions; whereas a being in which there is merely a sequence of movements upon impulses cannot contrast an actual with a possible self. The desire for food is not in man a mere blind impulse, but the self-conscious effort after an object conceived of as fitted to bring a certain form of self-satisfaction. The consciousness of the impulse is not the same thing as the impulse, but involves the contrast between the subject as he actually is and as he conceives himself as capable of becoming. The subject, however, is not one desire, but the universal possibility of desire; and hence any given desire receives its meaning from the total conception of himself which he has formed by repeated experiences of self-satisfaction. How he will act in a given case depends upon the conception of himself which he has formed by repeated experiences of self-satisfaction; but without such a conception he is not a subject of desire. If it is said that he will inevitably act in accordance with the

strongest desire, this either means that he will act according to the conception of himself which he has before his consciousness, or that his act will follow from the strongest impulse. The former view is true enough, but it does not distinguish between desire and volition, and without volition there is no action; the latter view is utterly untenable, because it fails to observe that the strongest impulse may be set aside when it is brought into relation with a wider conception of the self.

We may now see the mistake into which determinists fall, who say that the *strongest motive* determines the act. By the strongest motive they must mean the most intense impulse. That they do mean this is plain from the whole character of the theory. Every desire, it is said, is a desire for pleasure, and a motive is that desire for pleasure which is so strong as to overpower all competing desires. A "motive," in other words, is the strongest impulse. But no impulse, however strong, can be a motive. We must place the motive in something else than impulse, or purposive action is utterly inexplicable. What, then, is a "motive"? We are to suppose the subject to experience the feeling of want which we call hunger, and to have an idea of the act of eating as a means of satisfying the want. Now, the feeling of want as experienced is the consciousness on the part of the subject that his actual condition at the moment is not the condition in which he would like to be. Thus the subject contrasts his actual condition with a condition that as yet exists only as an idea. His desire consists in the feeling of dissatisfaction arising from the opposition between his ideal and his actual condition. But still there is no action. If man were only capable of con-

trasting in thought his actual and his ideal self, he would never act at all. What more is required? It is required that, having the idea of himself as satisfied, so far as this particular desire for satisfaction is concerned, he should also have the idea of a certain action or series of movements as the means of such satisfaction. But even yet there is no action. I may believe that by the act of eating I should satisfy my desire for food, and yet I may not eat. Before I eat I must *determine* or *will* to eat, and it is this self-determination or volition that constitutes the motive. Determining to obtain the satisfaction of myself so far as the desire in question is concerned I will the means, and the action follows. Now the satisfaction of myself in this particular way becomes my *motive.* It is therefore not the desire for satisfaction that constitutes my motive, but the *willing* of the satisfaction.

If we now look back to the theory that the strongest motive leads to action, we shall see that it is meaningless. There was a certain plausibility in saying that the strongest motive prevails, so long as it was supposed that action could proceed from impulse. For, if action is the result of a conflict between different impulses, the only plausible explanation is, that the impulse which has the greatest intensity prevails. It can be known to have the greatest intensity because it prevails, just as of two opposing forces of nature that is strongest which gives rise to the motion of a body. But if impulse of itself never becomes action no impulse can be a motive, and therefore the strongest impulse cannot be a motive. On the other hand, if the motive is the volition, not the impulse, there can be no meaning in saying that the

strongest motive prevails. Every volition prevails. No volition as such is stronger or weaker than another. But, when we have seen that there is no stronger or weaker volition, it is obvious that there is no such distinction as that between a stronger and weaker motive, since the motive is the volition. Every motive is the act of a subject who, believing that he will find satisfaction in a certain action, determines to do it, and therefore wills it. The motive is thus just the self-determination of the subject. And if so, *to have a motive is to be free.* If there is no motive apart from self-determination or will, freedom is inseparable from motives. The supposition that an act is not due to the subject arises from the assumption, which we have seen to be false, that an act is the result of the preponderance of a certain impulse. When we see that an impulse, however strong, would never of itself lead to action, we also see that the subject cannot be determined to act from any preponderance of impulse, but acts only as he determines himself to act.

From this analysis of action we also learn that there can be no "liberty of indifference," *i.e.*, no capacity of acting in opposition to motives. For, if a motive is just one of the modes in which the subject determines himself, to act contrary to a motive would be to determine himself to act in opposition to his own will, which is absurd. Moreover, if a man could act without any motive, he would be acting from pure caprice, *i.e.*, in opposition to the mode of action of a rational being.

We have seen then that a motive is never an impulse, and hence that to have a motive and to be free are the same thing. The doctrine that denies freedom

because man acts from motives, and the doctrine that affirms freedom because man can act without motives, are equally false; the truth being that man is free because he acts from motives. We have now to consider the view of freedom advanced by Kant, which differs from both of those theories.

Freedom, according to Kant, is not incompatible with motives, but it is incompatible with all the motives that arise from the natural desires. I am free if I will the moral law, *i.e.*, make duty my sole motive; I am not free if my act springs from a desire for some object which excites my sensibility.

The idea of freedom, it is held by Kant, is in the first instance a negative idea, arising as it does from its contrast to the necessity of nature. What do we mean by nature? We mean a system of things in which each is dependent upon something else. Nowhere in nature can we find any object that has a nature of its own. If we take any object in space, we find that all its properties consist in relations to something else. If a change occurs in any body, we find that the change would not have occurred unless the body had been acted upon by some other body. The permanence of a body therefore consists in the permanence of its relations to other bodies. Nothing exists as an independent substance. In fact, a substance not related to anything else would not belong to the system of things that we call nature.

Now, the moral consciousness of man seems to demand that we should be absolutely independent of circumstances, or, in other words, that we should be determined purely by ourselves. For the moral law

commands absolutely, refusing to abate its claims in view of circumstances. It says: "No matter what your natural tendencies may be you ought to determine yourself by the inner law of your own being."

But the difficulty arises that we seem to be, on the one hand, objects like other objects, and therefore to belong to the system of nature; while, on the other hand, we seem to be subjects, and therefore independent of the system of nature. How can we be both? How can we be at once under the dominion of natural law, and free from natural law?

To this Kant answers, that in his moral consciousness man has the idea of himself as under a law of reason, and that in willing this law he is free. When I make the moral law my motive I determine myself by the idea of myself as I really am, and in such determination I am not acted upon by anything external. To make the moral law my motive is to be free, because there is no external compulsion in willing what reason shows to be my true self. So far, therefore, as you will observe, Kant recognizes that to be free is to act from a motive. But in limiting freedom to willing the moral law, he manifestly gets into this difficulty, that when a man acts from desire he is not free. Apparently, therefore, we are free to will good actions, but not to will bad actions. And this would seem to imply that we are not responsible for doing wrong, since, when we do wrong, the act is not ours, but flows from the necessity of our nature.

The difficulty here referred to is inherent in the ethical doctrine of Kant. It arises from the absolute opposition of desire and reason. What we have to see is that such an opposition is inadmissible.

A desire, as we have seen, is never in itself a motive: it becomes a motive only when the subject identifies his own good with the object corresponding to the desire. Thus if, having the desire for wealth, I determine to seek my good in the pursuit of wealth, and will the acts necessary to secure it, I make wealth the "motive" of my action. There is, therefore, no proper meaning in saying that when a man acts from desire he is not free. For he never acts from desire as such, but only from the idea of himself as capable of being satisfied by the object of a desire.

Now, Kant holds that we are conscious of freedom only in contrast to our determination by natural desire. This would be a correct account of the matter if a natural desire as it exists in our consciousness were simply a fact or occurrence in consciousness, a mere state of feeling excited in us irrespectively of our self-consciousness. But if desire were merely a feeling that presented itself to us —were it simply an event like any other event—we should not be conscious of it *as a desire.* If I perceive a stone fall, I am conscious of an *event*, of a certain change as having occurred, but I am not conscious of it as an event which has occurred to *me*, as a change in *my* state. But this is what happens when I am conscious of a desire. When I have the craving of hunger, it is for me not simply an event, but an event that affects *me:* I am conscious of *myself* as striving in idea towards an object that promises satisfaction to *me.* We cannot therefore oppose desire to reason as if the former were a mere mechanical occurrence and the latter involved the consciousness of self. Desire, being already the consciousness of oneself as capable of being satisfied, involves self-

consciousness. The idea of satisfaction in the object of a desire is therefore already the possibility of will, and so of freedom. Kant is therefore wrong in contrasting action from desire with action from reason, as external determination to self-determination, necessity to freedom. Every motive, whatever its moral character—whether good or bad—involves freedom, because it involves *self*-determination. Kant, in other words, correctly says that freedom consists in willing the idea of self, but he is wrong in saying that willing the idea of self only takes place when we will the good. To show this clearly we must ask how the contrast of freedom and necessity arises for us.

Self-consciousness is primarily the consciousness of self as opposed to the world, and especially to other self-conscious beings. The self appears to be a single individual, who is conscious of desires that make for his *own* satisfaction, as distinguished from the satisfaction of others. But this apparent individuality or separateness of the self is a natural illusion; for it is impossible for the individual to find his *own* satisfaction apart from the world and from other selves. Selfishness is self-contradictory, because it seeks to satisfy the individual self by breaking the bonds which unite all selves; and hence it is a repeated effort to obtain satisfaction, ending in repeated failure.

Here is the point where the opposition of desire and reason presents itself. To act from passion, *i.e.*, from the idea of individual satisfaction, is seen to be to act in contradiction of reason, *i.e.*, to the idea of a universal satisfaction. We may therefore correctly contrast desire and reason, if by this we mean willing a selfish end and willing a universal end. Such a contrast, however, is not identical with the Kantian opposition of desire and reason;

for, on Kant's view, desire is a merely natural impulse, reason alone giving the idea of the self. Selfishness involves the idea of self as much as unselfishness; the difference is that the former seeks to realize the self in what is inadequate to its true nature, the latter seeks to realize the self in what is adequate to its true nature. We can therefore say that selfishness is irrational, but we cannot say that it is exclusive of reason. Only a rational being can be irrational. Reason involves the possibility of error as well as of truth; or, more precisely, reason gives man the idea of himself, and makes it possible for him to seek his good in what is inconsistent with that idea, while it also makes it possible for him to seek his good in what is consistent with that idea. The explanation of this anomaly is, that man at first seems to himself to be an individual standing in opposition to others. So appearing, reason tells him to realize this individual self. It is only when in attempting to do so he becomes conscious that he cannot realize himself in selfish ways that he comes to the consciousness of a self-realization through unselfishness. In this sense the Fall of Man is necessary to his salvation. Selfishness, in fact, may be called an irrational activity of reason, or a free willing of slavery. Freedom, then, is implied in all man's activity, but freedom can lead to perfect self-realization only when it is exercised in willing the good.

THE SUMMUM BONUM.

We have therefore to ask: What is the good? what is the *summum bonum?*

The answer of the Hedonist is that the highest good will consist in the greatest possible sum of pleasure. We need not stay to show that this cannot be the highest good: pleasure is no doubt involved in the attainment of the highest good, but the highest good must consist in the perfect realization of self, or, in other words, in perfection of character, not in the experience of pleasure. It will be more profitable to consider the Kantian conception of the *summum bonum*, which attempts to show that man can only attain his "being's end and aim" in so far as the conflicting claims of reason and desire are reconciled.

Kant begins by asking what is meant by the *summum bonum;* and he answers, that it may mean either (*a*) the *chief* good, or (*b*) the *complete* good. Now, there is no doubt that virtue is man's chief good, since apart from morality man cannot be good at all. But a finite being cannot attain *complete* good unless he also obtains happiness. The complete good therefore involves the combination of perfect goodness with perfect happiness. And as men are not good by nature, but can only gradually approximate towards goodness, reason demands that happiness should be experienced by each in proportion to his goodness.

The first point to be considered is, how happiness is related to virtue.

The Stoics and Epicureans hold that virtue and happi-

ness are identical. According to the former, the virtuous man is the only happy man; according to the latter, the happy man is the only virtuous man. This identification Kant rejects. To be virtuous is not necessarily to be happy, to be happy is not necessarily to be virtuous. A man may be virtuous without being happy, or happy without being virtuous.

The problem therefore remains, and at first sight it seems insoluble. If I will the moral law, do I thereby secure happiness? By no means: to secure happiness I must learn the laws of nature and be able to turn my knowledge to account in furthering my own ends. If, on the other hand, I make happiness my end, my action ceases to be moral.

When we look more closely, however, we find that there is an essential difference between the propositions, "Virtue is the necessary consequence of Happiness," and "Happiness is the necessary consequence of Virtue." The former proposition is absolutely false. The man who makes happiness his aim cannot be virtuous, because virtue consists in willing the moral law purely for itself. The latter proposition is not necessarily false. There is a sense in which it may be admitted to be true. We cannot say that by acting virtuously man will secure happiness, but it is quite conceivable that virtue *should* bring happiness, if the world were so arranged as to make happiness follow from virtue. Such a harmony man cannot effect, but it may be effected by a Being who stands to nature in the relation of its Author. The postulate, therefore, of an Author of nature is the only way in which we can conceive of the union of virtue and happiness.

This idea of nature as conceivably harmonizing with the moral life does not show that man can *realize* the *summum bonum*. There are two obstacles to such realization.

In the first place, man can realize the *summum bonum* only if he is capable of *perfect virtue*. To be perfectly virtuous would be to get rid of all immediate desire and act purely from the law of reason. Now, this is impossible, because man cannot get rid of the solicitations of desire, and therefore morality can only be a continual process of subjecting the desires, as they spring up, to the moral law. All that is possible for man is, not the completed harmony of his desires with his reason, but the certain hope of continuous progress in morality, as resting upon the habit of acting virtuously. Now, such a continuity in willing the moral law requires continued existence; and hence the possibility of realizing the chief good requires us to postulate the immortality of man. In no other way can we defend the absolute obligation laid upon us to live the moral life. In this life we can never realize the chief good, and therefore we are tempted to say that man cannot be required to realize it. On the other hand, if we say that in this life a man may become perfectly holy, we fall into "theosophic dreams" of a possible perfection that, with our continual shortcomings, is for us an impossibility. By the postulate of immortality we avoid both of these fatal alternatives: we do not need to relax the severity of the moral law, because we are capable of continual progress towards perfect holiness: and we do not fall into the dream of an impossible perfection, because we see that morality is an endless progress towards perfection.

In the second place, the realization of the *summum*

bonum implies the union of virtue and happiness. Supposing virtue to be more or less perfectly attained, how can we say that happiness in proportion to virtue must be united with it? Yet, if it is our duty to seek the highest good, it must be possible that it should be realized. Now, it cannot be realized by us, for though we may will the moral law, we cannot by that volition secure happiness. The union of virtue and happiness is therefore possible only independently of our will. It can be produced only by a Being who is distinct from nature and yet the cause of it. And such a Being must be a cause whose character is in conformity with morality, *i.e.*, a Being who is perfectly rational and perfectly good; in other words, God.

Kant's first postulate is immortality, or endless time, as the condition of the realization of the chief good, *i.e.*, of virtue. The natural desires are in antagonism to the moral law, and as man cannot get rid of them without ceasing to be man, this subjection to the law of reason is a *progressus ad infinitum*. Now, to this view it may be objected, in the first place, that not even the postulate of *infinite* time will account for the realization of virtue on Kant's premisses. For, so long as man is conceived to be a subject of desire, so long he is incapable of realizing perfect virtue. The opposition between reason and desire is supposed to be absolute, and therefore no extension of time will destroy it. If, indeed, we supposed Kant to hold that in a future life man would no longer be the subject of desire, we might suppose perfect virtue to be realized. But this he cannot hold, since his argument for immortality rests upon the conflict between desire and reason. We are compelled to postulate

immortality, because reason demands the realization of perfect virtue, and such realization is impossible because the work of reason in subjecting desire to itself is never complete. We must deny, then, that the postulate of immortality solves the problem of the realization of holiness. "Infinite time," as has been said, "is *not* enough for an impossible task."

In the second place, not only can virtue not be completely realized, but it cannot be realized at all. Kant's argument rests upon the absolute opposition of reason and desire; and it is plainly impossible to bring opposites any nearer to each other. On the other hand, if there is no opposition of reason and desire, the whole argument for a progress to infinity falls to the ground.

Kant's argument for immortality loses its force because he reasons from the impossibility of morality in a finite time to the possibility of morality in an infinite time. This argument we have seen to be invalid. The nature of a thing is not changed by the mere passing of time. "White is not made any more white," as Aristotle said, in criticizing the eternal ideas of Plato, "by being supposed to exist for ever." In other words, unless man can be moral now, he cannot become moral simply if he is supposed to exist for ever. What we must say, therefore, is that every act in which the agent identifies himself with an objective end is a moral act. In Kant's view no progress in morality is possible because morality can never begin. Just as knowledge cannot develop unless there is knowledge, so moral progress can be made only if man can be moral. Now, if man has within him a principle of morality, the argument for immor-

tality will take a new form. There is no limit, it may be said, to the development of a living principle. If man is capable of knowledge he is capable of growing intellectually until his knowledge "has orbed into the perfect star"; if he is capable of morality he is capable of a progress in morality to which no limits can be set. Thus we may argue, that as man is capable of infinite progress in knowledge and morality—in a word, of infinite self-development—immortality is bound up with the very idea of self-consciousness. To be completely self-conscious would be to know all reality and to have attained to perfect holiness, since perfect self-consciousness is possible only in the perfect union of subject and object. In other words, the argument for immortality must be based, not upon what man *cannot* know or do, but upon what he *can* know and do.

Kant's second postulate of God as the Being who harmonizes virtue and happiness is also open to objection. On the one hand Kant argues that the good lies in the will of man, so that it is realized whether a man attains happiness or not. The martyr sacrifices his happiness absolutely in laying down his life, yet in this sacrifice he realizes the good. There can therefore be no reason for postulating the existence of a Supreme Being, so far as the realization of man's true self is concerned. Happiness is, from this point of view, a matter of indifference. Kant, however, holds that reason rightly demands the union of virtue and happiness. But this union, he maintains, cannot be attained by man; and that for two reasons; firstly, because nature goes on by a law of its own, a law which does not harmonize with the law of reason; and, secondly, because each man is dependent

upon others, so that only in a community of perfectly moral beings could happiness be proportionate to virtue, and such a community is an ideal that can never be realized. Kant therefore argues that we must postulate the existence of God, just because in human life happiness cannot be united with virtue. They cannot be united, yet reason demands their union, therefore they are united in God.

But the argument, to be valid, must take a positive form. That the world is incompatible with the realization of the highest good cannot be a reason for maintaining the existence of God, but rather a reason for denying it. Only if it can be shown that the world is compatible with the highest good can we argue that existence is a manifestation of God. We must, in other words, show that in the moral life happiness and virtue are combined, and are combined just because "all things work together for good to them that love the Lord." This faith is the source of the religious consciousness, and from it spring all the efforts of men to raise themselves and others. We must therefore say, not that the impossibility of effecting the union of virtue and happiness is the ground of our belief in the existence of God, but, on the contrary, the possibility of such union. The union is effected for the individual in the willing of objective ends that bring satisfaction with them. The man who lives for his family at once wills the good and finds his happiness in realizing it. The reformer wills his country, and in devotion to it he finds his happiness. So in all cases of willing an end that is not selfish. It is true that complete happiness is not obtained. But neither is complete goodness. And it is not too much

to say, that a man is happy in proportion to his goodness. Even the martyr in the sacrifice of all lower happiness gains a happiness for which nothing else could compensate. It is, then, the possibility of this union of happiness and goodness in man that entitles us to maintain the perfect union of the two in God. If the world is compatible with the relative harmony of virtue and goodness in us, it already shows itself to be the expression of a Being who is perfectly good.

CHAPTER XI.

MORAL PHILOSOPHY (CONTINUED).

PHILOSOPHY OF RIGHTS.

WE have seen that the idea of Duty implies the identification of the subject with a universal end in which the true self may be realized; and that freedom is the capacity, and the highest good the result, of such self-identification. We have now to consider more particularly the forms in which the subject realizes universal ends. The first and simplest form is in relation to external things and services; in other words, self-realization is exhibited in the sphere of individual *Rights*.

Kant distinguishes the sphere of *Rights* from the sphere of *Morals* in this way, that in the former the will of man is viewed as expressing itself *outwardly* in acts, while, in the latter, it is viewed only as determined *inwardly* by motives.

The moral law tells us to treat all self-conscious beings as *ends*, never as *means*. But here a difficulty arises. When a man *acts*, his action takes an outer form, and therefore it affects the outer existence of others. If, *e.g.*,

a man steals my property, he interferes with that which is necessary to my existence as a particular being. The problem of jurisprudence is therefore to prevent one man from interfering with the free activity of another, and this cannot be done, consistently with the freedom of each, unless each man voluntarily imposes upon himself the same limit as he imposes upon others. Now, the principle of all free will is to act in conformity with a law that can be universalized. Applying this principle to external action, it would take the form: Impose no limit upon others that you do not impose upon yourself. For example, if others are to respect my property, I must respect theirs; otherwise the maxim on which I act is not universal.

All acts which prevent another from doing the like are self-contradictory. It is therefore in accordance with the law of freedom that such acts should be prevented or annulled. Hence the compulsion of law is quite consistent with freedom. A man is free to will a universal law, but he is not free to will what is merely agreeable to himself. Law, in compelling men to respect the rights of others, does not interfere with freedom, but only with the unreason of particular desires, which is, in fact, the negation of freedom.

Now, in the sphere of Rights, we have nothing to do with the motive from which an action is done, but only with the overt act. If a man respects the rights of property of others, Law does not ask whether he does so from the fear of punishment, from a desire for the esteem of others, or from regard for the moral law; it is enough that the act conforms to the law. Hence, the aim of law is not to make men act from the highest motives, but to

prevent them from acting in opposition to the rights of others. A right is thus something purely external. "When it is said that a creditor has the right of exacting payment from his debtor, this does not mean that he can put it to the conscience of the debtor that he ought to pay. It means that a compulsion to pay in such a case can be applied consistently with everyone's freedom, consistently, therefore, with the debtor's own freedom, according to a universal external law. Right and claim to apply compulsion are therefore the same thing."

Now, as in law freedom means independence of compulsion by another, and the reciprocal limitation of each by the others, the first of rights is *equality*. No man can demand of me what I cannot demand of him, and I can act towards others as I please so long as I do nothing to prevent them from acting as they please towards me.

How is such freedom realized in the outer world? What is meant by a right? Nothing can limit the freedom of one man but the freedom of another. (1) Rights belong only to *persons*, not to *things*. Outward things are the means of realizing the will of a person. Hence (2) rights are held by one person as against all others. And (3) lastly, the relation of persons is reciprocal. Slavery, *e.g.*, is inconsistent with the principle of rights, because it gives all the rights to one person, without recognizing that he is only entitled to rights at all if he respects the rights of all other persons.

The basis of all rights, then, is the inviolability of each person. But each person expresses himself in the objects into which he has put his will, and which are inviolable because expressing the will of an inviolable person. Thus arises property, the distinction of *mine* and *thine*. To

interfere with the objects in which each person expresses his will is to interfere with the person himself. Property is not the same thing as physical possession; it is an "intelligible" possession. A thing is mine, not because I hold it, but because my will is expressed in it.

(*a*) The first form, then, of rights is that of *jus in rem*, or the right of persons over things. Such a right implies other persons while yet it excludes them. It must be recognized, or persons would come into collision with one another. At the same time it does not imply the actual assent of others, and in this it differs from

(*b*) *Jus in personam*, *i.e.*, personal rights, the rights of one person to an object first possessed by another, or to some service which the other can perform for him. Such a right implies a direct act of transference to the one of that which primarily belongs to the other. This is *contract*. Here the right is established not against all, but against a particular person. In the case of contract for service, the service must be limited in extent and character, otherwise the *jus in personam* would be equivalent to slavery.

(*c*) Kant adds a third form of rights, *jus realiter personale*. Here a person becomes not only the subject but the object of a right, *i.e.*, a person is treated as a thing. Kant should evidently have said that such a right contradicts the very idea of free personality on which rights are based. The contradiction arises from the attempt to apply the idea of rights to the family. In marriage the contracting parties acquire right over each other. Each must surrender to the other. Hence polygamy and all irregular unions are contrary to the idea of personal rights, because they give to one a right not

granted to the other. Again, children have no rights as against parents, except the right to be supported and educated; corresponding to which is the right of the parents to govern and direct the child while its powers are immature.

So much as to the nature of Private Rights (*Jus Privatum*, *Jus Naturale*). But how is the individual to be secured in his rights? There must be a political power, which at once secures each man's rights and excludes him from interfering with the rights of others. There is therefore required a universal will armed with absolute power. The condition of those who submit to this power is the civil state. Everyone must enter the civil state, because in it alone is there security for rights. "The act whereby a people constitutes itself into a state . . . is the *original contract* by which all members of the people give up their freedom in order to take it up again as members of a commonwealth." The State frees the individual from his particular desires by bringing him under a law of reason. But Kant holds that the State can only take away hindrances to freedom. The social contract is therefore a contract men are bound to make; and, when made, it can never be broken. A right of revolution is a contradiction of the very idea of right. Rebellion can never be just, however imperfect the form of the State. To execute the sovereign, as was done in the case of Charles I. and Louis XVI., is a crime against the very idea of justice.

At the same time the true or ultimate form of the State is a Republic, and it is obligatory on the sovereign power gradually to bring the State into that form. In the Ideal State the supreme legislative power must be exercised by representatives of the people. This Kant seeks to prove

as follows. All citizens, as free, equal, and independent, are at once subject and ruler, *i.e.*, they are under a law which they themselves enact. But if so, must not all laws be enacted by *all the citizens?* At first Kant seems to say so, but he makes limitations which destroy the force of the admission. (1) There is a distinction between *active* and *passive* citizens. Passive citizens include women and children, house servants and day labourers, *i.e.*, all who sell their services. These are only *potential* citizens, and have no votes until they become *actual* citizens by gaining a position in which they do not sell their services. (2) There must be a *representative* system, in which the people do not directly legislate, but elect deputies to do so. The reason is that the legislative must be separated from the executive power. But while the whole people should not legislate, no law should be passed to which the whole people could not give their assent. For example, a law giving supreme authority to a *class* is not just. Hence it is wrong to secure such authority to a class by inheritance. But any law that a whole people could possibly accept must be regarded as just, even though at the time the people might not assent to it. Applying this principle, Kant rejects all privileges of birth, all right of inheritance in offices of State, and an established church, especially if it has a fixed creed. So all corporate institutions, for education or charity, are subordinate to the State, and may be abolished at any time and their property seized. The citizens, on the other hand, should have the right of free speech; for all laws must be assumed to be such as the whole people would enact, and therefore the people have the right to show that any law proposed or enacted is contrary to that

principle. Kant therefore denies Hobbes' principle, that the sovereign has only rights and not duties. It is the duty of the sovereign to enact nothing that is contrary to justice, and to enact everything that is essential to the maintenance of justice.

Kant applies this idea of the State to *Penal Justice* in an unflinching way. Punishment, he holds, must be inflicted without any regard to the happiness either of the criminal or of society, but solely with a view to the maintenance of justice. Legal penalty (*poena forensis*) is not like natural penalty (*poena naturalis*). Vice punishes itself by bringing unhappiness, but the punishment of crime is purely because of the transgression committed. A man is punished because he *deserves* it; punishment is his own transgression coming back upon himself. Whether punishment is *useful* is not to the point: for "if justice perish there is no longer any value in the existence of men upon the earth." The principle on which punishment should be inflicted is that of equality. By inflicting evil on another a man affirms that the same amount of evil should be inflicted on himself. Hence the only adequate punishment for murder is death, for nothing is commensurable with death but death. "Even if a civil society were on the point of being dissolved with the consent of all its members (*e.g.*, if a people dwelling on a desert island had resolved to separate), they would be bound first of all to execute the last murderer in their prisons."

Passing now to *International Law*, we have to ask on what principles it is based. It is based, says Kant, on the same principle as the law of the State. Just as individual men were bound to combine in a State, so all States are bound to combine in a Universal State. But

the practical difficulties which stand in the way are so great that we must be content to employ the conception of a Universal State mainly as an ideal. An everlasting peace cannot be realized, but to it a continual approximation may be made, and therefore every State ought to act with a view to its realization. Kant even suggests articles for the future Law of Nations, which he thinks would tend to bring about such a peace. (*a*) No treaty of peace shall be made with the secret reservation of causes of quarrel. (*b*) No State shall be transferred by inheritance or gift. (*c*) No public debts shall be contracted with a view to war. (*d*) No State shall in war make use of means that destroy mutual faith, *e.g.*, breach of capitulation or attempts to make use of treachery among the enemy. But these articles are merely preparatory. It is further required that every State should be republican in its constitution, for no other constitution is based on the freedom and equality of all the citizens. It is the great body of the people who suffer from war, not the king or governing aristocracy. Starting from one republic, a federation of States may gradually be secured, with the object of preventing war. In such a league one special article would be to secure the rights of each citizen in the contracting States as a "citizen of the world," *i.e.*, to secure to him freedom to visit and to trade in other countries than his own. Finally, the principle of all politics is that what is right should be done, not what is practicable. We cannot tell what is practicable, but we can tell what is right. The philosopher ought therefore to be called in to assist the statesman, *i.e.*, there should be free discussion of the principles on which States are and ought to be based. Thus in

politics, as in morals, we shall learn to make what ought to be our standard.[1]

CRITICISM OF KANT'S DOCTRINE OF RIGHTS.

Kant's Doctrine of Rights may be said to be a transference to the outward acts of man of that opposition between Desire and Reason, which on his general theory is exhibited in the inner world of the individual's own consciousness. The actions of a man may either flow from a desire for his own personal satisfaction, or they may be consistent with the law of reason. In the former case everything which the man desires he will seek to secure by employing the means necessary. Thus he may desire to possess land, or goods, or the services of others, simply because he regards these as fitted to minister to his individual pleasure. But desire has no limit in itself. If I act purely from a desire for land, I shall take it without any reference to the desires of others. It matters not that another may possess the land, and may equally desire it with me. I care nothing for his desires, but only for my own. If I come into collision with another because we both wish to have the same land, the only way to settle the conflicting claims is that "he should take who has the power, and he should keep who can." "Might is right." Thus the unlimited exercise of desire leads to violence, to the war of all against all, in which the strongest or the most cunning will

[1] A fuller statement of Kant's doctrine of Rights will be found in Caird's *Critical Account of the Philosophy of Kant*, Vol. II., chapter vi., which is so admirable that nothing remained for me to do but to condense it. The same remark applies to the statement of Kant's "System of Moral Duties" given below.

succeed best. So far as desire is concerned, no individual has any rights; because no one recognizes the claims of another, and each seeks to satisfy his own natural desire for what will bring him pleasure.

With this activity of natural desire Kant contrasts the activity which proceeds from a law of reason. For reason denies the claims of mere desire, and asserts that each man should be treated as a "person," *i.e.*, as a being who has claims to external things. Reason says that I have no more claim to external things than other persons. If limits are to be set to my naturally unlimited desire for my own satisfaction, I must not only claim a right over things, but I must admit that others have an equal claim over them. Now, things are limited, and therefore no single person can lay claim to all things. The only way therefore in which violence can be brought to an end is by each person limiting himself to those things that belong to him. So long as these limits are observed there can be no disputes and no violence.

But here the difficulty arises, that it is always possible for the individual to fall back upon natural desire. Men are quite willing that others should respect their rights, but under the influence of natural desire they are prompted to deny the rights of others. A piece of land belongs to another, but some one who covets it may get possession of it if he is stronger or more cunning than the rightful possessor. Thus the unlimited claim of desire is substituted for the limited claim of reason. Now, anyone who thus sets up his own desire as ultimate can no longer claim to be treated as a rational being. If he is justified in seizing a thing which belongs to another simply because he desires it, another is equally

justified in seizing what belongs to him, and thus the reign of violence begins over again. To act from desire is thus to appeal to violence, and therefore violence may be employed against him.

It is from this point of view that Kant justifies the existence of the State. A power is needed to compel the desires of men to keep within the limits of reason. If men always respected the rights of others, there would be no need for any external force to compel them to do so. But they do not; and hence a power outside of themselves is required to make them respect the rights of others, and to make others respect their rights. In the outward sphere, therefore, a State Power is necessary to "compel men to be free." And only the State can be invested with such a power, because violence exerted by an individual is merely a new manifestation of desire. For example, in blood-feuds, the motive is not a law of reason, but the desire of revenge. It is therefore justifiable to force men to enter into society, since society is the condition of each person becoming free.

(1) This theory of society is not self-consistent. It holds, on the one hand, that rights belong to individuals irrespective of society, and, on the other hand, that for such rights they are indebted to society. For Kant bases individual rights upon the conception of a person as an abstract or exclusive self. As such an abstract self I can realize myself in independence of other selves. My freedom consists in this, that there are things in which my will is expressed, and with which no one may interfere. Now, it is no doubt true that the conception of rights as an ideal excludes the interference of others with what is mine. But who is to secure the observance of such

rights? Obviously, the individual must recognize that the law of reason, and not the law of desire, is to be obeyed, *i.e.*, he must view himself as a member of a community in which the rights of all are bound up with the rights of each. If so, the community is not a matter of accident: it is not a contract into which individuals may or may not enter, but it is a form of association to which they belong, because otherwise they would have no rights. In other words, suppose each man to be only accidentally related to others, and there can be no absolute rights, because no one is bound to combine with others. The individual may say, I prefer to seek my good by myself, *i.e.*, I prefer to find satisfaction for my desires by getting as much as I can for myself. Only if we grant that without society men cannot realize their true self, can it be maintained that no one is justified in separating himself from society. But if society is necessary to constitute a right, as distinguished from a mere object of desire, it cannot be said that society is an accidental relation into which men may or may not enter; it is a relation into which they *must* enter by the very law of their reason. I have rights only as a member of society, not as a separate individual.

If we develop what is implied in Kant's theory, we shall see that he virtually admits society to be essential to the existence of rights. For he maintains that men may force others to enter into society, and that it is an absolute duty to respect the order of society when once it has been formed. On what ground can it be maintained that men may be compelled to enter into society, unless on the ground that only so can man's true nature be realized? On any other supposition society can have

power over the individual only because it is stronger than he, *i.e.*, it becomes a mere despotism, interfering with the individual's claim to be free of its regulations. But Kant really implies that the compulsion of society is a compulsion of reason. Men must enter society because in society they get rid of the caprice of their individual desires, which have no limit in themselves. Hence Kant holds that, whether the individual consents or not, the laws imposed by society must be respected; and this means that society is essential to the very existence of rights, *i.e.*, to the necessary means by which the individual secures his freedom.

This may be seen still more clearly if we consider Kant's theory of *jus realiter personale*. Take, *e.g.*, the family relation. Kant admits that here the principle on which all other rights are based does not properly apply. An ordinary right can exist only in relation to a thing, *i.e.*, an object which has no personality. No one can possess a right in a person, because that would make the person a mere thing, and deprive him of his personality. This is why slavery is contrary to the idea of rights. The slave has no rights. Now, in the family relation, there are no exclusive rights. Husband and wife give up to each other their independent personality, and have no rights as against each other. What belongs to the one belongs also to the other, so far as the relation applies. Here therefore there are no exclusive rights; in other words, the separate personality of each is negated. Kant says that in this case the surrender of personality is reciprocal. No doubt this is true; but if personality is surrendered by each, it must be because there is here a bond higher than that of abstract personality; for other-

wise the relation would be a violation of freedom. The facts thus force Kant to admit that the true nature of man is here realized only on the supposition that man in his true nature is not an abstract person, but is capable of entering into a relation which is higher than abstract personality.

Now the same thing applies to society. The members of a State are not separate individuals who may or may not combine, but their combination is essential to the freedom of each. Each individual is a member in an organism, and realizes himself only as he makes the common good his end. If society is organic, individuals can have no rights apart from society. In other words, the foundation of the claim for rights must lie in this, that the general good can be realized only by assigning to each individual rights with which no other individual may interfere. The ultimate reason for the claim to rights is not that as an individual a man has such a claim, but that the perfection of his nature as a social being demands it. If it could be shown that men would realize a higher perfection in a society in which there were no individual rights, we should have to say that such rights cannot be permitted. The reason for maintaining personal rights is thus a social one.

(2) Kant holds that law deals only with overt acts, not at all with the motives from which acts are done. Morality, again, looks only at motives, asking whether the will has been determined purely by the law of reason, and not by desire. What we may seek is a form of the State in which individuals are brought into external harmony with each other; but we must not by means of law seek to make men moral. Goodness cannot be produced

by the compulsion of society, because, while you may make men conform to the external law of society, you cannot make them good. Goodness is something that can be realized only by each subject for himself. It is certainly the individual's duty to do what he can to bring about a more perfect form of society, and he must also try to further the happiness of others; but he cannot be asked to make them good, because it is not in his power to do so. Thus mankind is conceived as a sum of independent persons.

Now, if there are no rights apart from society, we cannot thus separate the moral development of each individual from that of others. It is no doubt plausible to say that the inner life of each is hidden from every one but himself, or, at least, only imperfectly expressed in his outward actions; and that we can therefore infer nothing in regard to the inner life of others without first experiencing it in ourselves. It is indeed a mere truism that what we have had no experience of we cannot learn from without. But this inner experience is not separable from outer experience. We have not first a knowledge of our own individual states and then refer these by analogy to others. It is only when we have gone beyond our immediate feelings that we understand ourselves at all, and the same process enables us to understand others. Nay, it may be said that we first learn to understand ourselves by understanding others. It is through the community of persons that the individual understands himself. If there were no common life, if society were not an expression of morality, the individual would never realize the meaning of his own moral nature. When a man comes to the consciousness that in his own reason

there is a law of morality, he at first opposes the idea of himself to the community; but had he not been moralized by the community in the first place, such a return upon himself would be impossible.

(3) And this leads us to see what is the true meaning of *punishment*. Kant denies that punishment can be regarded either as *preventative* or as *educational*. The sole object of punishment is to vindicate the principle of rights. The criminal affirms the law of his natural desires, and society uses violence to cause his irrational act to recoil on himself. Properly regarded, there is no contradiction between these three theories of punishment. The object of all punishment is to maintain the social unity as against the caprice of individuals. Punishment is therefore preventative in this sense, that, by tending to awaken in men the consciousness that they are all members of one body, it supplies them with an ideal which tends to prevent them from acting as if they were mere individuals. It is also educational, because it tends to awaken the consciousness that crime is worthy of punishment. And lastly, it is a vindication of right in the sense that right is the means by which the higher social self may be realized. Observe, however, that punishment is not preventative merely in the sense that it hinders the commission of particular crimes, but in the sense that it affirms the principle which strikes at the root of all crimes. That is to say, the object of punishment is not simply to deter men from crime by the fear of punishment, but to lead them to view crime as irrational. So punishment is educational, not in the sense of making men fear the penalty, but in the sense of making them fear the guilt. And finally, punishment vindicates right, not as the rights of

individuals, but as the condition of the higher self which is realized in the social organism. We may therefore say that punishment has to do with the moral nature of man, because it seeks to make the individual substitute the rational motive of self-realization by identification with others for the irrational motive of self-realization by separation from others. Thus the two ends of making men moral and making them happy combine in one: for, as morality is identical with real happiness, to secure the one is to secure the other also.

SYSTEM OF MORAL VIRTUES.

What, then, are the special forms in which man realizes himself? What, in other words, are the specific duties of man?

Kant's conception of duties, as distinguished from rights, is that whereas the latter are enforced by society, the former are enforced by the individual upon himself. Law compels men to respect the rights of others, whatever their natural inclination may be; Morality compels a man to respect the moral law which his own reason reveals to him. The opposition is no longer between an external authority and natural inclination, but between natural inclination and the internal authority of reason. No one can compel a man to be moral, because morality consists in free submission of the individual to the moral law. A man may act in accordance with the idea of duty because he is compelled to do so by the pressure of an external authority, but his act is not therefore moral, because it is not done from a moral motive. In morality the motive as well as the action must be in harmony with the law. This is the single *principle* of duty. But

this principle takes different forms according to the different ends which are sought to be realized, *i.e.*, we can distinguish various duties by distinguishing the various ends of action which we ought to have.

Now, there are two ends which we ought to realize: (1) our own perfection, (2) the happiness of others.

(1) By perfection is meant conformity with the moral law. Such conformity is possible only in so far as a man rises above his animal nature and develops the faculties belonging to him as man. Perfection therefore means, *firstly*, the development of the faculties characteristic of man. But, *secondly*, perfection implies purity of will, *i.e.*, that virtuous temper of mind in which the moral law is the sole motive and standard of action. Our duty to ourselves, then, is to develop all our faculties and to cultivate purity of will.

(2) Our duty to others is to seek their happiness. It is not our duty to seek our own happiness, for that is an end which natural inclination inevitably prompts us to seek. The happiness of others, again, is not what they think to be their happiness, for often they suppose it to consist in what is inconsistent with it. Nor can we seek the perfection of others directly, for perfection can only be secured by the individual himself; still we may indirectly aid men in their efforts after perfection, by avoiding everything that will mislead them into a false view of their perfection. Thus the moral law implies two commands: (1) Do for yourself all that you regard as binding upon others; (2) Do for others all that you would wish them to do for you.

We must, however, distinguish between "obligations of right" and "obligations of virtue." There are various

duties, and one of these may limit the other to a certain extent. Thus the question may arise how far philanthropy is to be limited by one's duty to his own family. It is a man's duty to seek both the general good and the good of his family, and no exception can be admitted; but how far he is to seek the one or the other must be determined by particular considerations.

There are *three* characteristics of duty.

(1) There is only one ground of each duty. For example, obligation to truthfulness is not the injury done to others by lying, but the moral worthlessness of the liar.

(2) The difference between virtue and vice is a difference in *kind* not in *degree*. Aristotle is therefore wrong in making virtue a mean between two vices. The virtue of good husbandry is not that more is spent than is done by the avaricious man and less than is done by the prodigal. Prodigality and avarice are vices because their motives are immoral. The prodigal spends his money simply as a means to enjoyment, the avaricious man saves his money because of the enjoyment which is found in its possession; good husbandry makes use of wealth simply as a means to higher ends.

(3) Our duties are not determined by our capacity, but our capacity by our duties. We must not say, "I have done all that could be expected of me," but, "I have not attained to the perfect standard of humanity."

Virtue may be called a "habit," if it is added that it is a "free habit," or a "habit of acting by the idea of law." Virtue is always advancing, because it is an unattainable ideal: it is always beginning, because the natural desires cannot be got rid of, and therefore we never attain to a perfectly formed state of virtue. If our actions ever

became merely habitual, they would have no moral character, because there would be no freedom in the choice of maxims of conduct.

Kant distinguishes between (1) Duties to ourselves and (2) Duties to others.

I. Duties to Ourselves.

1. *Negative or Strict.*

(*a*) Duties to ourselves as having an animal nature.

These correspond to the three natural impulses of (α) self-preservation, (β) maintenance of the species, (γ) maintenance of the capacity to use one's powers for useful ends, and for the animal enjoyment of life. These are virtues, because man's physical life is a means to his existence as a person. The vices opposed to them are (α) suicide, (β) unnatural sensual indulgence, (γ) inordinate enjoyment of the pleasures of the table.

(*b*) Duties to ourselves as moral beings.

There are here also three virtues, (α) truthfulness, (β) good husbandry, (γ) self-respect. The corresponding vices are (α) lying, (β) avarice, (γ) false humility. The liar is "a mere semblance of humanity, and not a true man." Avarice is the slavish subjection of oneself to the goods of fortune. As to false humility, "he who makes himself a worm cannot complain if others trample upon him." As a person, a man is above all price, and ought not to crouch before his fellows, as if he had no self-centred life of his own. Even the slavish fear of Eastern devotees before the divine involves a sacrifice of human dignity.

All the duties of man to himself rest upon his being the "born judge of himself." Hence man's first duty is

to "know himself," in the sense of finding out what conscience commands. "Descent into the hell of self-knowledge is the only way to the heaven of divine excellence."

2. Positive.

These are simply the duties of developing the bodily and mental powers, and above all the duty of cultivating purity of will.

II. Duties to Others.

These are either (*a*) those which give rise to an obligation on the part of others, or (*b*) those which do not give rise to an obligation on the part of others. The former are accompanied by the feeling of love, the latter by the feeling of respect. Love and respect ought to be united. We may compare them to a force of attraction and a force of repulsion. "By the principle of mutual love men are called upon to approach each other, by the principle of respect to preserve a certain distance from each other. As mere *feelings*, love and respect are not duties; the duties are respectively benevolence and reverence for others as persons.

(*a*) The maxim of benevolence rests on the principle that we can wish well to ourselves only on condition that we wish well to others. The duties that fall under it are three: (α) beneficence, (β) gratitude, (γ) sympathy.

(*b*) The duties of reverence for others arise from "the recognition in other men of a worth for which there is no price or equivalent." We must reverence the dignity of humanity even in the degraded and vicious. Hence we must condemn all punishment by mutilations, which

bring shame on humanity. So we must respect the intelligence of others, and in correcting their errors bring out the element of truth in that which misled them.

The vices opposed to respect for humanity are (α) pride, (β) evil-speaking, (γ) readiness to mock and insult.

There are other duties determined by age, sex, or circumstances, but they cannot be determined on general principles. Of these the most important is Friendship.

Kant holds that we can further the happiness of others, but not their moral perfection. For, if a man is acted upon by another, he argues, he cannot be determined purely by the moral law, and therefore he cannot be free. Each man must therefore work out his own moral salvation. It is our duty to seek our own perfection and the happiness of others, but it can never be a duty to seek the perfection of others or the happiness of ourselves. Kant, however, so far modifies his first view as to admit that we may individually assist others in the attainment of moral perfection by taking care not to throw temptations in their way which would lead to their having the misery of a bad conscience. In other words, it is each man's own duty to preserve a blameless conscience, and when he does wrong he can blame no one but himself. To say that "the woman tempted me" is to deny one's freedom as a rational being. But, while no one can blame another for his moral guilt, each may blame himself for putting obstacles in the way of another. For human nature is weak, and is too ready to follow the passions.

Now, if it is admitted that we may put hindrances in the way of others, it cannot be denied that we may also act so as to help others in their moral life. If a man

by his bad example tempts others to wrong, may he not also by his good example induce others to do right? Kant thinks that we cannot affect directly the moral life of others, because morality is a personal matter. Morality is no doubt a personal matter, but it is not therefore carried on in isolation. The influence of good or bad example would not be a moral influence, if men were not capable of appropriating what is good or bad for themselves. Men are not exonerated from moral blame because others act immorally, nor do they cease to deserve moral praise because others act morally; but this does not alter the fact that morality is essentially social. We are moral beings only as we are capable of viewing ourselves as members of a social organism. We usually determine the moral quality of our actions by reference to the standard of the society to which we belong. If it is objected that in that case we are simply acting from custom, the answer is that to view conduct from the social point of view is not necessarily to act from custom. To act merely from custom is to act by reference to an external standard, the basis of which we do not comprehend. To act from the social point of view, on the other hand, is to judge all actions, our own and others, from the unexpressed principles on which the common social life rests. The consciousness of these principles gradually grows up in us because we gain the consciousness of ourselves only in and through our relations to others. It is true that we may at a later stage come to be conscious that the ordinary standard of action embodied in the special form of society to which we belong is inadequate; but the consciousness of this inadequacy would be impossible for us did not society already

involve rational principles of action. Thus he who has been so far moralized by coming to the consciousness of the principle upon which the family rests, is prepared for the comprehension of the wider principle upon which the State rests, and, ultimately, for the still wider principle upon which humanity rests. Thus, moral freedom is not the freedom of the mere individual, but the freedom which rests upon self-identification with a universal law that first reveals itself to us in a social law.

From this point of view we can see that there can be no opposition, such as Kant maintains, between our duty to ourselves and our duty to others. Every duty is at once a duty to ourselves and a duty to others. Thus the duty of furthering one's own physical and moral well-being is at the same time a duty to society, because it is only by doing so that we can become fit members of the social organism. We are to withstand the immediate promptings of desire, but the gratification of these is contrary at once to our own welfare and the welfare of others. Nor can it be said, as Kant says, that we must give up our own happiness for the good of others and not at all of ourselves. If this were so, the perfect form of society would be one in which each surrendered all that belonged to himself. In such a society, the aim would be to gratify the selfishness of others, not to reach a point in which all selfishness is done away. In point of fact, the attempt to yield up all to the will of another may develop enormous selfishness on the part of those to whom the surrender is made.[1] What we ought to seek is to secure the moral

[1] It may be worth while referring to the illuminating poetic treatment of this idea in Euripides' *Alcestis*, at least as "transcribed" and interpreted in Browning's noble "Balaustion's Adventure."

perfection of all, ourselves as well as others; and this can only be secured by acting from the point of view of a universal good applicable alike to them and to ourselves. Thus only can a higher spirit take possession of every member of the community.

CHAPTER XII.

PHILOSOPHY OF THE ABSOLUTE.

RELIGION.

MORALITY ultimately rests upon the consciousness of an ideal good for man which is identical with the good of existence as a whole. In other words, there is no absolute good unless it can be shown that man is seeking to realize what is in conformity with the unchangeable nature of God. A rational faith in God is, therefore, at the basis of morality.

This is denied by Kant. He maintains that morality is independent of religion, because the reason of man commands him to realize the moral law, even irrespective of the union of virtue and happiness. The idea of morality is its own guarantee, and unless it can be established independently it is impossible to prove the existence of God at all. God is postulated only because on no other supposition can we explain the possibility of the union of virtue and happiness.

Kant, however, proceeds to ask how far, in consistency with his own theory, he can accept the fundamental ideas of the Christian religion. And, first of all, he discusses the question of Original Sin.

The problem, as he puts it, is this: There is in all men a bias to evil; and this bias seems to be a tendency inherited from our ancestors. But, on the other hand, when we do a wrong action, we attribute the evil to ourselves, and that irrespective of any inherited tendency to evil. How, then, are we to say at once that evil is a natural propensity over which we have no control, and that evil is under our own control, or is done freely?

(1) What constitutes the bias to evil? It does not lie in our natural impulses as such. The appetite of hunger, *e.g.*, is in itself neither good nor bad, and for it we are in no way responsible. Nor can we explain the evil bias as due to a loss of the idea of moral obligation; for, if we had no idea of moral obligation, we should not be responsible for our acts, nor should we even be conscious of guilt. So far as we view man as a sensuous being, endowed with immediate impulses, we reduce him to the level of the animals. On the other hand, if man's will were absolutely evil, if he were not conscious of himself as under obligation to obey the moral law, his sole motive would be to act contrary to it. Man would act on the principle of Milton's Satan: "Evil, be thou my good"; he would, in fact, be "neither more nor less than a *devil*." Now, if the bias to evil does not lie in the natural impulses, nor in the rational nature of man, wherein can it lie? It can only lie, Kant answers, in this, that man subordinates moral law to happiness, instead of subordinating happiness to moral law. Thus, though the natural impulses are in themselves morally indifferent, they become evil when they are made the motives of action. The bias to evil is thus the tendency in man to disobey the moral law, which his reason prescribes, by seeking

for his own individual happiness, *i.e.*, for the satisfaction of all his immediate desires. Kant accepts the scriptural doctrine that "there is none righteous, no not one," but he does not admit that the tendency to evil can be explained by referring it to any person but the agent himself. Evil exists for each man only as he himself wills evil.

But how are we to explain the fact that every man exhibits this tendency to seek for happiness, instead of making the moral law his sole motive? The tendency undoubtedly exists in man prior to all definite acts of will, and it seems natural to say that the individual must have received the bias not by his own act, but from some external source. This explanation, however, cannot be accepted. If my evil bias comes from another, I am not responsible for it; nothing can be attributed to me but what I freely will. Kant gets over the difficulty in his own peculiar way. Every volition that I exert proceeds from the very centre of my inner being, but I cannot make that inner being an object of my knowledge. My volitions I must necessarily present to myself as events in time, but in their true nature they are not events in time. Hence a volition is not due to anything but itself; it proceeds from the free activity of the subject. When we do an evil act, we may say that we fall out of the state of innocence into the state of guilt. Every evil act is thus a new fall from innocence: the fall of man is perpetually reënacted. We cannot shift our responsibility for evil to the acts of any one prior to ourselves, because each evil act may be described as an uncaused act, *i.e.*, as an act proceeding straight from our own will. If, however, we ask, Why does man

will evil, and thus fall or rather plunge into evil? we can find no answer: the origin of evil is inexplicable. The Biblical narration seems to express this when it makes temptation come from an evil spirit. This, however, leaves unexplained how a being who is pure within could be tempted from without, and we must therefore interpret it to mean, not that man is really tempted by an evil spirit, but that the fall from purity is unsearchable. We see, however, *why* it is unsearchable; for to comprehend the origin of evil we should have to contemplate the inner nature of man as free from the form of time, and that is impossible from the necessary limitation of our knowledge.

Similarly, when we read that sin is inherited from our first parents, we must not interpret the statement literally. Our first parents could not sin for us, but only for themselves. What we must understand is, that we recognize that in his place we should have acted as the first man is represented as acting. And if we cannot comprehend how a free being should fall from innocence into evil, no more can we comprehend how he can turn again from evil to good. We need not, indeed, exclude the idea that some "supernatural coöperation with our will may be needed to remove hindrances, if not to give positive help; but if such coöperation be possible, we must first make ourselves worthy of it," *i.e.*, we must open our wills to receive it by our own free action. To suppose that we can be made good in any way but by good action, *e.g.*, that a supernatural influence can be got by doing nothing but praying, "which, before an all-seeing Being, is nothing but wishing," is mere superstition.

On these principles, we must say that man passes from

evil to good, or from good to evil, in an instantaneous act. Conversion is an instantaneous act in this sense, that it implies an absolute change in the principle of the will, a change which cannot be better expressed than by calling it a new birth or even a new creation. Still we can only realize this change by a progress from worse to better; and only God, whose intelligence is not limited by the form of time, can perceive as a complete whole what for us is a succession. We can only have a relative confidence in the change of principle within us, but as we find our character grow in stability our confidence will be also increased.

The Pauline doctrine of Redemption, like that of the Fall, is reinterpreted by Kant in his own way. As he denied that moral evil can be imputed to any one because of the guilt of another, so he denies that any one can become morally good by the imputation to him of the righteousness of another. Adam's sin cannot become our sin, nor Christ's goodness our goodness. Yet the Pauline idea of redemption points to a truth. The Stoics supposed that our moral warfare is with passion. The Apostle saw that our "warfare is not with flesh and blood, but with principalities and powers," *i.e.*, with evil spirits. The spirit of evil, however, is not external but internal; it is a principle of evil in the very nature of our own will. And it can be combated only by another spiritual power, viz., by a principle of good. Yet, though evil and good spring from the individual man himself, the principle of good is by St. Paul personified in a way that corresponds to the truth. We never know our own nature as it is behind the veil. We speak of that as an event, which is indeed the source of all events in the way of volition, but which

in its real nature cannot be called an event at all. Thus the root of all moral evil and good lies hidden in the inner nature of man, though it exhibits itself in a long series of acts. The principle of good being in us, and yet not being produced by ourselves, it may properly be said that it has come down from heaven and taken our nature that it may elevate us, who are by nature evil. Hence it is that we must speak of the willing of good as done for us by another, by one who has realized the ideal of humanity; for God cannot love the world except as ideally realized in the complete moral perfection of humanity. Kant, in short, holds that the righteousness of Christ is imputed to us only in the sense that God takes our imperfect goodness (as springing from the eternal principle of goodness in us) as equivalent to perfect goodness. For though man in this life can only approximate to goodness, yet, if the principle of goodness is at work in him, it will ultimately purge his nature of all evil. Thus, in so far as we are conscious of continued purity of will, we may have a foretaste of the joy which must spring from an unalterable will for the good. "This joy we may fitly represent as an eternal bliss of heaven, secured to us through unity with our divinely human Lord; while its opposite sorrow will appear to us as an endless hell, through identification with the spirit of evil."

What, then, is to be said of our past guilt? How can there be atonement for it? Our present obedience is imperfect, and, even if it were perfect, it could not atone for the past. In willing evil in the past we have, it would seem, taken the principle of evil into our inmost being, and therefore merited infinite punishment. To atone for our past guilt, it may appear that at the moment when

our will proceeds from the principle of evil to the principle of good, we ought to bear an infinite punishment. Kant meets this difficulty by saying that the change from the corrupt to the good man already involves the sacrifice of self and the acceptance of a long series of the evils of life, merely for the sake of the good.

Kant's subjective view of morality prevents him from doing justice to the truth contained in the Pauline doctrine of the Fall. In St. Paul's conception man is not a separate individual whose inner life is incapable of being influenced by others. On the contrary, he conceives of all men as members of one great organism, so that the evil or good of one communicates itself to all the rest. The sin of Adam passes on from generation to generation, and works increasing woe to man; and the Law, while it makes men conscious of the evil power which has taken hold of them, does not enable them to throw it off. On the other hand, Christ is the source of a new regenerative principle, fitted to restore the whole of humanity to more than its original purity. Viewing this new principle as having already realized what it is fitted to realize, St. Paul says that as in Adam all die, so in Christ all are again made alive.

Kant, again, denies that either nature, or man, or even God can directly hinder us in our willing of the moral law. He will have no interference with the self-determination of each individual subject. Now, the subject so isolated he conceives of as having no motive but the law of reason, or, in other words, as containing within himself only the principle of good. If so, the willing of evil is not only, as he says, "mysterious," but it

is a manifest impossibility. For the subject to will evil, he must cease to be what he is. But Kant had too clear an eye for facts to deny that man wills evil, and therefore he goes on to say that man may will evil in so far as he subordinates reason to passion. The moral recovery of man is not, as the Stoics held, a negation of passion, but its subordination to the moral law. Hence evil must, he says, consist in a perversion of the proper relations between reason and desire: it cannot lie *either* in the natural desires, which in themselves are neither good nor evil, *or* in the corruption of reason, which is impossible. But this opposition is false. (*a*) The desires of man are good or evil according to their object; (*b*) reason does not demand the realization of an abstract good, but of a definite good. The moral perversion of man is not to be explained as a war between two separate principles, but as a conflict in the nature of man himself as capable of willing particular or universal ends. The conflict can only come to an end when the consciousness of an abstract law of goodness is transmuted into the consciousness of social relations.

Kant, however, has made a step in advance of the Stoics. The Stoics also held morality to be a life according to reason, *i.e.*, a life in which man is in no way under the dominion of passion. But they go further than Kant in maintaining that the moral life consists in the absolute extinction of all the natural desires. The passions, they say, are "unnatural," *i.e.*, they are in absolute contradiction to the rational nature of man. Hence man can only be himself if he expels all the natural desires, and so comes to "harmony"

with himself. This doctrine makes the passions something so foreign to the nature of man that the difficulty is to explain how man should ever be under the influence of passion at all. If man is by nature pure reason, how does he come to give way to passion? Are we not compelled to hold that he cannot be pure reason, or, in other words, that passion is his self-surrender to evil? The Stoics, however, simply assume that as a matter of fact natural desire has an influence upon man, and, affirming the passionless life of reason to be the true life, they say that passion must be extruded as a foreign element. Kant, on the other hand, makes an attempt to explain how passion comes into the will of man. Man is by nature a composite being, having both reason and desire. Evil is not the mere determination by desire, but a determination by the will that places desire above reason. The moral recovery of man is therefore not the annihilation of desire, but its subordination to reason. This is the compromise by which Kant seeks to harmonize desire and reason. The desire for happiness is reasonable, but not the desire for happiness at the expense of morality; and in the elevation of happiness over morality he finds the explanation of evil.

If we carry out to its consequences the view of Kant that man is by nature at once rational and sensuous, we shall have to transform his doctrine. If the moral end is to bring desire into conformity with reason, we cannot hold that desire is the abstract opposite of reason. There can be no truce between irreconcilable enemies. The true realization of self must be a realization in which the sensuous and the rational aspects of man's life are in harmony with each other. The desires of man are not

impulses, but desires for particular objects which only differ from the universal end of reason in being particular modes in which that end is sought to be realized. The moral division in man's nature does not arise from the conflict of two opposite principles, but from a false application of the one principle of self-determination. It is the same self that is present in what is called the life of sense and the life of reason. Even a wrong desire is possible only to a being who in his desires is seeking a universal good, a good that will bring harmony to his ideal nature.

The great imperfection of Kant's view of the moral life lies in its strong individualism. The moral law he conceives as so absolutely a law of our own being that we can be aided in our moral life neither by God nor man. This view is an exaggeration of the principle of individual liberty, which was the watch-word of the Reformation. Luther insisted upon the absoluteness of the individual conscience, but he maintained that before God the individual has no freedom. The enlightenment of the eighteenth century denied even this reservation, and thus the individual was left alone with himself. Kant accepted the principle of individualism, but he maintained that the individual is truly himself only as he prescribes for himself a universal law—the law of his own being. The individual is influenced by others only on the side of his sensuous desires, and even that influence is possible only as his will gives assent to them. In opposition to this view, we must say that the law which man prescribes to himself presupposes objective ends in which the individual may realize himself. It is true that we cannot be satisfied, in the realization of any particular end, with the

satisfaction of a particular desire; but this dissatisfaction arises only from the consciousness that in willing a particular end we have not realized the self. This opposition, however, is transcended when the true meaning of the particular desires is apprehended; for then we find that the particular end may be willed as identical with the universal or good. It is this identification of desire with good that constitutes morality. All particular objects of desire become good in so far as they are the specific forms in which universal good is realized. From this it follows that the moral law is primarily social. Our consciousness of ourselves as moral and spiritual beings is made possible only by our consciousness of other selves. The outer law which binds the different members of society together is really an inner law. Man can rise above his immediate desires, just because he can rise above the point of view of his own individual life and live in the life of others. At first, indeed, the law of society appears as an external law based upon authority, and when man comes to the consciousness of law as the inner law of his own being, it is only natural that he should oppose this inner law to the outer law of society. But in reality it is both inner and outer, the law of his own being, and a social law which binds him to others. The important thing is, that he should submit to the law of society, not because society imposes the law, but because he consciously recognizes it to be identical with the realization of himself.

The nearest approximation of Kant to the view that man's moral life is essentially social, is contained in his conception of an invisible ethical community. This

community, as he holds, rests upon the idea of the moral law as realizable because it ought to be realized; and therefore it seeks to remove the hindrances which prevent men from living the moral life. Until such a community is established, all men are in an ethical state of nature, in which they hinder on all sides the moral advancement of the race. The great power of evil in the world is the envious rivalry of men. In society they corrupt each other, and become each other's worst enemies. They ought, therefore, to combine on the basis of a common submission to the moral law. In this community force cannot be employed, because moral freedom is inconsistent with it. This community can only be imperfectly represented by any outward institution. The nearest approach to it is in the growth of the consciousness of the importance of morality.

This conception of an ethical community is not consistent with the general principles of Kant. As we have seen, his principles led him to deny that the individual can further the moral life of others. But he so far modifies this view as to say, that men may put temptations in the way of others, and hence that they may combine to remove hindrances to the moral life. In this doctrine Kant is virtually preparing the way for the idea that true freedom is realized in and through social relations. Man is rational, not because he lives an inner life with which no one can interfere, but because no influence upon him is purely external. The influence of others does not really interfere with the freedom of the individual, because such influence becomes a motive only as it is passed through the transmuting medium of self-consciousness. Thus the influence of

others may be good or bad, not because it forces the individual to act in a certain way, but because the ideal of self cannot be realized by the individual apart, but only through the development of the ideal in society. Kant's fundamental mistake is to view the natural desires as belonging to the individual sensibility which may be acted upon from without. Every natural desire being, on his view, a susceptibility of the individual to be affected by what is external to him, he assumes that to speak of the influence of society is the same thing as to speak of the influence of natural desire as understood in this unspiritual way.

It is only another form of the same imperfection that Kant allows of no distinction between morality and religion. Morality is a purely individual matter, and therefore man cannot be aided in his moral life by God any more than by others, or at least only by God, in so far as he himself wills the law of his own reason. Now, if we thus conceive of God as necessarily withdrawn from the inner life of man, we fall back upon a self-determination which is purely individual. The moral law thus becomes a law only for the individual. Man cannot, indeed, being what he is, rid himself of its authority; but, after all, the goal of his efforts may be only the realization of an ideal that does not harmonize with the true nature of things. What he supposes to be moral progress may, from the point of view of God, be moral retrogression. Thus that which constitutes the essential feature in the religious consciousness is lost, or at least becomes problematic. The essence of the religious consciousness is the assurance that in realizing the higher life man is a fellow-worker with God, and that in so realizing himself all things work

together for good. If man cannot identify himself with God all his strivings are vain efforts to escape from the prison-house of his own limited individuality. If he cannot know God he can know nothing, because all his apparent knowledge must be infected with the illusion of his finitude; if he cannot identify his will with the will of God, his goodness is from the absolute point of view a mere semblance. Hence the consciousness of the moral law cannot be separated from the consciousness of God without losing its power and authority. What gives absoluteness both to the individual conscience and to the laws of society is the identity of both with the infinite perfection of God. It is true that neither involves a complete consciousness of all that is implicit in that perfection; but, except in so far as man is conscious that in himself and others the divine is continually being realized, he has no ground for his faith in goodness. Ultimately, therefore, morality rests upon religion.

ART.

The higher consciousness of man expresses itself not only in Religion but in Art. What in the one takes the form of a personal experience, lifting the individual above the flux of the transitory and reconciling him to himself and to the world, takes in the other the form of an objective presentation of the ideal nature of existence in one or more of its manifold phases. To deal with so important and complex a subject as the Philosophy of Art in anything like an adequate way would require much time and care, and we must be content at present with a short statement and criticism of the aesthetic theory of

Kant, who, in this as in other branches of philosophy, was the first philosopher of modern times who attempted to treat the subject in a comprehensive way. His doctrine is open to grave objections, but it is full of fertile suggestion, and is a distinct advance upon the superficial or inadequate theories of his predecessors.

There are, in Kant's view, two objects of Art, the *beautiful* and the *sublime*. Beauty is not, as is usually supposed, a quality of the object, but a peculiar feeling of satisfaction which arises in us in the mere contemplation of the object. Our aesthetic judgments are therefore entirely independent of practical utility: a flower, for example, will be pronounced beautiful, quite irrespective of its market value. The feeling of satisfaction awakened in us by a beautiful object is quite unique, and must not be confused either with the feeling of pleasure associated with the satisfaction of desire—say, the desire for a fine wine—or with the feeling which is connected with the willing of a good act. For in both of these cases our satisfaction springs from *interest* in the object as related to ourselves, whereas the feeling of beauty is entirely *disinterested*, arising as it does from the bare contemplation of the object called beautiful, and in fact it is the only free and disinterested feeling of which man is capable. It follows from this that, as the feeling of beauty is not determined by the peculiar sensuous susceptibility of the individual, we have no hesitation in affirming that all men must find beautiful the object which awakens in us a disinterested feeling of satisfaction. How, then, are we to explain these peculiarities of our aesthetic judgments? —for manifestly a judgment which rests upon feeling, and yet is universal and necessary, urgently demands explana-

tion. Kant's answer is, that the secret does not lie in the object as such, but in the fact that in contemplating it the subject is conscious of an immediate harmony in the relation of his faculties of knowledge. His intellect and his perception perfectly correspond, and therefore he naturally feels pleasure so long as he remains in the aesthetic mood. Such pleasure is very different from the satisfaction which accompanies the resolute willing of what is binding upon him by the law of his reason. The feeling of beauty comes without effort the moment we contemplate the beautiful object disinterestedly, and it therefore gives us a sort of prophecy of that union of reason and sense which no effort of ours can actually realize.

Besides the beautiful we frame aesthetic judgments in regard to the sublime. These judgments agree in their main characteristics with those in regard to beauty, but there are important differences. For one thing, the feeling of sublimity arises in us even when the object as perceived has no definite limits, though it is always conceived as a whole. The feelings themselves are also different in kind, for, whereas the feeling of beauty is direct, the feeling of sublimity involves a momentary check to the vital forces, followed immediately by their more vigorous outflow. The mind is at once attracted and repelled, and the accompanying pleasure is therefore negative rather than positive: it is in fact due to the disharmony between the object perceived and an ideal object existing only for thought. Strictly speaking, therefore, there is no sublimity in nature, but only in ourselves, and in ourselves as rational beings.

The sublime has two forms, which may be distinguished as the *mathematical* and the *dynamical*. In the first

place, the feeling of sublimity may be called out by that which is too great in *magnitude* to be pictured by the imagination. Such an object is the immensity of the starry heavens. Here we have the conception of an absolute whole, while yet the imagination utterly fails to give a complete picture of it. We may imagine world on world, and system stretching into system, but by all our efforts we cannot attain to that completeness of view which is contained in our idea of the whole material universe. It is this inability to give form to our thought which gives rise to the feeling of the sublime. The very failure of imagination awakens in us the consciousness of a power within ourselves far transcending sense and imagination. "Thus the feeling of the sublime in nature is a kind of reverence for our own character as rational beings which we transfer to an object of nature."

In the *second* place. we have the feeling of sublimity in the presence of the *forces* of nature. We are aware of their greatness, and yet we feel that they cannot overpower us. That force we call great which we cannot resist; yet we may be conscious of our powerlessness without being afraid. "The virtuous man fears God, but is not afraid of Him"; for he knows that if he desired to disobey His commands he would have reason to fear. So we may be conscious that as physical beings we are impotent to resist the tremendous forces of nature, while yet there is in us a power that nature cannot overcome. The true sublime is therefore within us. The natural man quakes at the storm or the earthquake: the moral man is raised above fear by the consciousness of moral harmony with the will of God. The feeling of the sub-

lime is less common than the feeling of beauty. It implies considerable culture, and hence the rude and undeveloped find the forces of nature simply terrible. From its very nature the feeling of the sublime is a more direct aid to the moral life of man than the feeling of the beautiful; for it arises in the contrast of the inner to the outer, and therefore it prepares the way for the higher moral interest. Hence the Jewish religion, which was preëminently the religion of sublimity, was also the religion in which moral ideas were most powerful.

Turning to the artistic representation of the beautiful, we have to remark that beauty excludes the idea of definite purpose. The products of art must appear as free from conscious design as if they were products of nature. The beautiful cannot be produced according to rule; it must proceed fresh from the hands of genius. In this gift of genius the true artist is distinguished from his imitators. He gives expression to aesthetic ideas, *i.e.*, ideas of imagination which give occasion for much thought, but to which no definite *conception* is adequate. Such ideas are the counterpart of the ideas of reason, to which no *perception* of sense can be adequate. The productive imagination creates out of the world we know a new world, which is constructed on principles that occupy a higher place in our reason. Its products may well be called *ideas*, because they arise from the effort after something lying beyond the limits of experience, and give an approximate presentation of the ideas of reason; and because no conception of the understanding can be quite adequate to them. "The poet ventures to give sensuous realization to invisible

things, the realm of the blessed, heaven, hell, eternity, creation; or, if he represents that which is exemplified in experience, as, *e.g.*, death, envy, love of fame, yet, imitating by imagination the boundlessness of reason, he seeks to give them a complete sensuous realization for which nature furnishes no parallel."

As art presents the idea of the supersensible in sensuous form, its products are a *symbol of moral ideas.* A symbol is an image which does not adequately present the idea of reason, but only suggests it. The beautiful is the symbol of the morally good, and hence it makes possible the transition from the allurements of sense to a habitual interest in goodness. "When we find a man interested in the beauty of nature, we have reason to believe that there is in him at least a basis for a good moral character."

The great value of Kant's conception of beauty lies in the accuracy with which he has noted the seemingly self-contradictory elements contained in our aesthetic judgments. He is still, it is true, perplexed by his imperfect analysis of human feeling, as apparently fluctuating and uncertain, but he insists, and rightly insists, that beauty is not "subjective" in the sense of having no basis but the changing states of the sensitive individual. Thus he breaks once for all with that shallow hedonistic aesthetics which had in England its representatives in such writers as Burke and Alison. On the other hand, Kant refuses to accept the doctrine of Baumgarten, itself a distorted application of the philosophy of Leibnitz, that our aesthetic judgments rest upon "a confused conception of perfection," seeing clearly that, except by a liberal interpretation of its

spirit, this doctrine must lead to the final extinction of art as but an imperfect and preparatory stage of abstract science. Kant has therefore to reconcile, as best he may, the two aspects of beauty which are essential to its very nature; and hence he affirms with equal emphasis (1) that it rests upon feeling, and (2) that it involves thought. Thus he is led to say that our aesthetic judgments proceed from a disinterested pleasure in the contemplation of beautiful objects, and that they are universal and necessary, while yet no definite conception can be adduced in support of their claim to universality and necessity. He therefore falls back upon the doctrine, that the peculiar character of such judgments can be explained only on the supposition that the consciousness of beauty arises from the harmony with each other of imagination and understanding, and that their universality is due to the identity of all men in these faculties and their consequent agreement in the experience of aesthetic pleasure in the presence of an object which brings their knowing faculties into harmony with each other.

Now, if Kant is right, as he certainly is, in saying that in the consciousness of beauty the subject is in harmony with himself, he is not entitled to retain that opposition of the consciousness of self and the consciousness of the object which haunts him like a spectre through the whole of his speculations. Beauty is either a pure illusion, having no foundation in the nature of things, or our aesthetic judgments are "objective" in the most absolute sense. The feeling of harmony with himself which man experiences in the contemplation of beauty must be regarded as the other side of the harmony which underlies the world as it really is. It is only because Kant is

not able to get rid of the conviction that nothing can be *known*, in the strict sense of that term, which cannot be compressed within the framework of the "scientific" categories of thought, that he still speaks of our aesthetic judgments as if they required an apology because they do not rest upon "definite" conceptions. In point of fact, what Kant calls the "indefiniteness" of the conceptions involved in such judgments is really their comprehensiveness. It is just the infinity of the beautiful object, *i.e.*, its power of revealing the whole in the part, that gives rise to the peace and harmony of the whole man, and lifts him above the allurements of sense and the strenuous effort of the struggle after goodness. The only sense in which beauty can be called "subjective" is this: that the divine meaning of the world is revealed through it, but is not completely realized in it. This, however, merely shows that the concrete realization of the idea of the whole, which is the differentia of beauty, still leaves room for that reflective grasp of existence which it is the function of philosophy to supply.

PART II.

NOTES HISTORICAL AND CRITICAL.

I. THE PLATONIC AND ARISTOTELIAN CRITICISM OF PHENOMENALISM.[1]

A. PLATO'S CRITICISM.

PERHAPS there is no better way of realizing the necessity and nature of speculative philosophy than by entering sympathetically into the discussion of Phenomenalism or Sensationalism contained in the *Theaetetus* of Plato and in the corresponding part of Aristotle's *Metaphysics*. It is no doubt true that ancient and modern philosophy move on different planes; but, just because Greek thought was less perplexed by the complication of the categories of reflection, in which the modern mind lives and moves, it was less liable to import into sensible perception conceptions which belong to a more developed stage of thought. An attempt will here be made to bring out the inner connection of the successive steps in Plato's argument.

In the *Theaetetus* Plato examines the doctrine that knowledge of the real is given in sensible perception

[1] See Chapter i., pp. 1, 2.

(αἴσθησις). Starting from the natural assumption that there is a real world existing independently of our apprehension of it, he inquires whether it is revealed to us in sense, and only in sense. This doctrine is formulated in the words, "Knowledge is nothing but sensible perception" (οὐκ ἄλλο τί ἐστιν ἐπιστήμη ἢ αἴσθησις). This view of knowledge, it is suggested, is what Protagoras really meant when he said that "man is the measure of all things" (πάντων χρημάτων μέτρον ἄνθρωπος). The saying is not from ambiguity. It might mean merely that man is capable of apprehending the real nature of things. Taken in this sense, the doctrine affirms nothing which would not be admitted by Plato and Aristotle, who always assume that objective reality has a fixed nature of its own, and that knowledge must consist in grasping it as it is. The doctrine that there may be something in the nature of the human intelligence which prevents us from knowing reality is a doubt which did not arise till modern times. The question which Plato raises is not whether knowledge is possible, but whether it is given in sensible perception, or in some other way. It has been said that in criticising Protagoras, Plato "does not attempt to understand him from his own point of view."[1] This is so far true, that Plato, like Aristotle, does not make it his main object to find out the element of truth which commended the doctrine to the mind of Protagoras. The Protagorean doctrine, like all first glimpses of truth, contains within it irreconcilable views, which are not explicitly formulated, and are therefore not seen to be irreconcilable. It may mean either (1) that human knowledge is based

[1] Jowett's *Dialogues of Plato*, third ed., iv. 147.

upon universal propositions, or (2) that it consists in particular propositions. So long as these two discrepant views are not clearly distinguished, no satisfactory theory of knowledge is possible. Protagoras, in Plato's opinion, did not clearly distinguish them, and therefore he assumed that knowledge consists in the direct apprehension of things in sensible perception. Fixing upon this aspect of the Protagorean doctrine, Plato insists upon developing the consequences which follow from it. He is interested in the discovery of a true theory of knowledge, not in the degree of truth to which Protagoras may or may not have attained. Nor can it be said that the method of Plato is illegitimate. If philosophy is to be a science, as distinguished from a collection of uncritical opinions, it must insist upon precise and definite thought, and must therefore test any given theory of knowledge in the most rigid way. Now, certainly Protagoras regarded knowledge as consisting in the immediate apprehension of things, and it is this view which Plato proceeds to examine.

Knowledge, then, we are to suppose, is "nothing but sensible perception." Now, sensible perception is the apprehension by each man of what is presented directly to him, and if it is the measure of reality, there can be for each man no reality except that which presents itself in each perception. The doctrine, when more precisely stated, must therefore be: "As each thing appears to me, it is to me; as it appears to you, it is to you" (ὡς οἷα μὲν ἕκαστα ἐμοὶ φαίνεται, τοιαῦτα μέν ἐστιν ἐμοί, οἷα δὲ σοί, τοιαῦτα δὲ αὖ σοί). So far there is no denial that things have a nature of their own, or that they are always identical with themselves; all that is said is that *for each man* they must be what they 'appear' to him. But obviously

there is already a tacit distinction between what 'appears' and what 'is.' For, if it is found that things do not always 'appear' the same, the difficulty will arise, how we can continue to affirm that they 'are' the same. Plato therefore goes on to show that things do not always 'appear' the same.

The same wind is 'hot' to one who is 'cold,' 'cold' to one who is 'hot.' Now, if perception is the only source of knowledge, and perception is immediate presentation or 'appearance,' we must say that the wind 'is' or 'appears' to one man 'hot,' to another 'cold.' It is still assumed that the real object is identical with itself; the *same* wind, it is said, is 'hot' to one, 'cold' to another. How the same thing can have opposite qualities, or produce opposite effects, is not asked. But, in his next step, Plato suggests a doubt as to the assumed identity of the real object with itself. The transition is not arbitrary, but follows as a natural sequence upon a recognition of the implicit contradiction between the assumption that the thing itself is unchangeable, and that perception presents it in opposite ways. If things are always the same, as is commonly assumed, why should they appear different? On the other hand, if things themselves undergo change, nothing would seem more reasonable than that they should appear different. Plato affects to suppose that Protagoras, detecting the latent contradiction in his doctrine, attempted to remove it by adopting the view that things themselves contain opposites, but only communicated this 'truth' to his disciples as an esoteric theory too difficult for the 'uninitiated' to understand. This suggestion is, of course, a touch of Socratic irony. It is Plato's way of saying that Protagoras was unaware

of the contradiction in his own doctrine. The esoteric theory referred to is, that "nothing is one in itself" (ὡς ἄρα ἓν μὲν αὐτὸ καθ' αὑτὸ οὐδέν ἐστι) and that "we are not entitled to speak of a thing as a certain kind of thing" (οὐδ' ἄν τι προσείποις ὀρθῶς οὐδ' ὁποιονοῦν τι). It is therefore a popular fallacy that sensible objects are of a fixed and unchangeable nature: in reality what is supposed to be 'one' is 'manifold,' and what seems to be a permanent property is but a passing phase in the process of change which all things undergo. All the earlier thinkers, with the exception of Parmenides, recognize that the sensible object is really complex, and implies a process of change. This is not only the doctrine which Protagoras imparted to his disciples in secret, but it lies at the basis of the Heraclitic 'flux' and the 'mixture' of Empedocles. If we accept their theory of the nature of things, we must look upon the world as a scene of incessant change. We cannot say that anything 'is' (ἐστί) or remains constant and the same, but that it 'becomes' (γίγνεται), *i.e.*, is in process of transition. 'To be' (τὸ εἶναι) really means 'to become' (τὸ γίγνεσθαι), and 'not to be' (τὸ μὴ εἶναι) is to 'cease becoming.' In support of this doctrine that nothing is 'one,' but everything passes through manifold changes, and that no mode of a thing is fixed and determinate, many strong reasons may be advanced. What is 'heat' but a mode of motion arising from some other mode of motion, *e.g.*, friction, and passing into another mode of motion? Is not the life of animals one of incessant change? Does not mental as well as bodily life consist in its process? Nay, would not all things in heaven and earth come to an end, were the eternal revolution of the sun to cease?

Let us apply this general conception, that all things are in process, in explanation of the variation in the perceptions of different individuals, or of the same individual at different times. We commonly suppose that 'white' or some other colour belongs to an external thing, independently of its perception by us, and that in perception we apprehend the colour as it is in the thing. But in truth the thing, taken by itself, has no such quality, nor is colour something belonging to the eyes: it exists neither external to the eyes, nor in the eyes (*μὴ αὐτὸ ἕτερόν τι ἔξω τῶν σῶν ὀμμάτων μηδ' ἐν τοῖς ὄμμασι*). 'White' is not something having a definite position in space, where it persists or 'is'; what we call its 'being' is really its 'coming to be,' and before it 'comes to be,' it is not 'white.' Here, therefore, we have a special application of the doctrine, that "nothing exists in itself as one" (*μηδὲν αὐτὸ καθ' αὐτὸ ἓν ὄν*). 'White' comes into being when something not itself 'white' acts upon the eye, the result being that the eye then has the sensation of this peculiar colour, and the object appears as having that colour. But, since both factors are necessary, a change in either will involve a change in the product. It is for this reason, as we must suppose, that even what we call the same person has at different times different sensations. As a sensitive being he is not the same, and therefore he has not the same sensations from what is called the same object. If the colour were a fixed property of the external thing, the same object would not present itself as different; and if the eye were always the same, the perception of the same object would in all cases be the same; we must therefore regard the colour as originating in the moment of perception, and the perception as arising in relation to it. We can thus understand the variation in perception of

different individuals, or of the same individual at different times.

That there is nothing permanent in the nature of things seems to receive confirmation from the contradictions which arise from supposing number to be a fixed property of things. If we have before us what we call six dice, and place four beside them, the six seem to be a half more than the four; but if we place twelve beside them, they seem to be only half. Now, if number belongs to things themselves, how can the same objects differ in number, when we bring them into relation to different objects? Does not this show that number arises only in the relation of things to one another, just as colour involves the relation of the percipient subject and the perceived object? Yet this doctrine seems to be in conflict with the laws of magnitude and number. For surely, (1) nothing ever becomes greater or less, so long as it is equal to itself; (2) a thing is always equal to itself, unless something is added to it or taken from it; (3) what was not before cannot now be, without having come into being. But these laws do not seem to agree with the facts. (1) The six dice apparently remain the same, and yet they seem to become more or less when compared respectively with four and twelve. (2) Nothing may be added to or taken from the size of Socrates, and yet he is larger and smaller than Theaetetus in the course of a year. (3) Thus Socrates becomes less, though he has undergone no change. It would seem, then, that a thing may be both equal and unequal, that it may increase or decrease while remaining the same, and that it may change without changing. Thus our conceptions of magnitude and number seem to be inconsistent with the nature of things. A perception of

this apparent inconsistency gives rise to 'wonder' and in 'wonder' philosophy is born. There is here a real difficulty of which those who hold obstinately by their first view of things have no consciousness. We must therefore consider with respect the doctrine of those who deny that there is any fixed nature of things. Perhaps they may be right; their doctrine at least seems to harmonize with the view of Protagoras, that what we call 'being' is really 'appearance.'

The doctrine of these subtle thinkers is, that there are no fixed and unchanging things, but only a continual process of change. They distinguish, however, between that which 'imparts' and that which 'undergoes' change. Actual changes, they tell us, are infinite in number, and arise from the coincidence of the 'active' and 'passive.' The former appears as what we call the 'sensible' (τὸ αἰσθητον), the latter as 'sensation' (αἴσθησις). The coincidences of these two forms of change are infinitely various, and hence we have to content ourselves with naming a few of the most marked. The one change never occurs without the other; so that there is no 'sensible' without 'sensation,' and no 'sensation' apart from the 'sensible.' Hence we can say nothing about either except in relation to the other. The 'sensible' 'is' only as it 'becomes' from contact with 'sensation,' and 'sensation' 'is' only as it 'becomes' from contact with the 'sensible.' It is thus obvious that we know nothing of a thing in itself, or of perception in itself.

The doctrine of Protagoras, as thus interpreted, explains the origination of a particular sensation as the passive effect of the activity of an object. Each sensation, it is assumed, exactly reflects the change which arises from the

relation of agent and patient. What 'appears' therefore 'is,' *i.e.*, the appearance is the appearance of an actual change in the object. It follows that no perception can ever be false; for, in order to be false, the percipient being must act upon itself, whereas, according to the theory, it is percipient only as acted upon. An objection may be raised to this doctrine on the ground that it does not explain perceptions which are obviously false. If what 'appears' in immediate perception is a reflex of the object, the appearances in dreams and madness must be true. But it is hard to believe that the incoherent fancies of the dreamer or the madman are true.

Protagoras, however, would answer that we are here assuming an identity in the agent and patient which we are not entitled to assume. There is no single object or single percipient, but only a succession of states which we unwarrantably assume to imply continuity. Each 'sensible' is cut off from every other: each 'sensation' is purely individual. There is an infinite number of separate agents and patients, and none of these is the same with its predecessor. This is shown by the fact that each agent has a different 'power' (δύναμις), and each patient is at every moment different. The combination of a different agent with a different patient must produce a different product. Thus, when Socrates in health drinks wine, the wine is pleasant; when Socrates is ill, the wine is unpleasant. Socrates in health is therefore entirely different from Socrates ill, and the former agrees with the latter only in name. It follows that each perception 'is' only as it 'appears' at the moment when it 'appears.' My perceptions, whatever they are, are therefore what they must be, and hence even dreams and the fancies of a madman are

true for him to whom they appear at the time when they appear.

Plato has thus brought the doctrine that knowledge is nothing but sensation or immediate feeling into a precise and definite form. For each percipient what 'appears' is true in the moment in which it 'appears,' and there is no other truth. It is this doctrine which we have now to examine. An obvious objection to it is, that all perceptions must be equally true. Protagoras says that 'man' is the 'measure of all things.' But 'man' is not the only being who has perceptions, and therefore we must hold that every sensitive being is capable of truth; that a pig, or a dog-faced baboon, will be the measure of reality as truly as a man. And if we say that only men are 'measures' of truth, one man will be as good a 'measure' as another. Why, then, did Protagoras write a treatise on "Truth"; implying that *his* 'truth' was more true than that of other people? If knowledge is identical with each man's perceptions, each man is the sole judge of what is true for him, and he does not require Protagoras or anybody else to tell him what is true.

Protagoras, however, may answer that we have grossly misrepresented his doctrine. He does not hold that all men's perceptions are equally 'good'; he only says that they are all equally 'true,' and that so far as perception goes, the impressions of the sick are as true as the impressions of the healthy. This, however, does not mean that we cannot help men to have better impressions and therefore better opinions. The physician cures a man by changing the condition of his body, the sophist by changing the condition of his soul. To say that one man is no 'wiser' than another because every man's perceptions are

'true,' is mere quibbling; wisdom does not consist in superior knowledge, but in a change in the man, which results in his having better opinions. Philosophy is a practical art, and the older a man gets the more he sees the futility of mere disputes about words.

The charge made against Protagoras was that his doctrine made every one equal in wisdom; the defence we have supposed him to make is, that all men are not equally 'wise,' though all opinions are equally 'true.' We have therefore to ask whether these two views are reconcilable with each other. Can we hold both (*a*) that what 'appears' to each man 'is' for him to whom it 'appears,' and (*b*) that some men are 'wiser' than others? Now, whether some men are wiser than others or not, Protagoras must at least admit that men ordinarily believe that some men are wiser than others; in other words, they believe that some opinions are true and others are false. But Protagoras tells us that the opinion of each man is true to him. Now, the majority of opinions are contrary to the doctrine of Protagoras. But, on his own showing, these opinions are true; and as they contradict his opinion, the latter must be false. Hence Protagoras must admit that his doctrine is false. Thus, both according to Protagoras and his opponents, the doctrine that every opinion is true must be false. What Plato contends, then, is that Protagoras, in affirming every opinion to be true, affirms what is self-contradictory. If every opinion is true, the opinion that his doctrine is false must be true, and therefore it is not true that every opinion is true.

The doctrine of Protagoras, that what appears to each is true, is evidently untenable when it is taken in the widest sense. We cannot say that all judgments or opinions

are true, merely because to each man at the time his opinion seems true. Protagoras, in holding that one man excels another in wisdom, must admit that this is especially the case in judgments as to health and disease. Nor will he maintain that every man in every state is equally competent to decide what is expedient and inexpedient. The question still remains, however, whether immediate sensations are true or not; and to this difficult problem we must again address ourselves. Let us therefore once more consider the bearing of the doctrine that nothing 'is,' but all is 'coming to be,' upon the Protagorean view that "knowledge is nothing but sensible perception."

Now, the followers of Heraclitus tell us that there are two kinds of motion or change: (*a*) local motion (φορά), which is either transposition or revolution, (*b*) alteration (ἀλλοίωσις). Since these thinkers deny that anything is ever at rest, they must hold that all things change in both ways. Now, we saw before that perception arises from a change taking place both in agent and patient, so that the object becomes qualified (ποιόν τι) and the patient a percipient. But, if there must be change both in the way of local movement and of alteration, the quality which comes to be must itself be in process of change, and so also must the corresponding sensation. But, if neither the sensible nor sensation can be said to 'be,' but only to 'become,' neither can be named, for as we try to name it, it has become something else. Protagoras tells us that 'knowledge is sensation'; but, now that we have discovered sensation to be in flux, we must rather say that it 'is,' and 'is not,' sensation. Thus the doctrine of the followers of Heraclitus, instead of supporting the view of Protagoras, overthrows it.

We may therefore set aside as untenable the doctrine that "knowledge consists in nothing but sensation." And, indeed, it may be shown in a more direct way that sensation in itself gives no knowledge. The senses are merely the means or organs by which we obtain a knowledge of things. Though they have each their appropriate object, they cannot bring different objects together and pronounce each to be identical with itself and different from the others, or determine each as a unity, or observe their likeness and unlikeness. This can only be done by that which is itself a unity, a unity to which we may give the name 'soul.' Those common characteristics are grasped only by the 'soul.' Thus, on the one hand, the 'soul' perceives the sensible qualities of objects through the senses, and, on the other hand, it thinks their 'reality,' their 'likeness' and 'unlikeness,' 'identity' and 'difference,' purely through itself. Knowledge of reality or truth is therefore dependent upon reason, not upon sensation; and only by the exercise of reason can we come into contact with the real nature of things.

B. ARISTOTLE'S CRITICISM.[1]

While Aristotle's criticism of phenomenalism is in substantial agreement with that of Plato, it differs in being more confident in tone, and more positive in character. In the *Theaetetus*, at least, Plato is still in search of a true theory of knowledge, and though he is convinced that the Protagorean theory is untenable, and that any true theory must be based upon reason, not upon sense, he has as yet no systematic doctrine to put in its place.

[1]Met. Γ, 5, 1009ᵃ, 6-6, 1011ᵇ, 22.

Aristotle, on the other hand, has a fully rounded system, which seems to him to explain both knowledge and reality, and he therefore expresses without hesitation his conviction that phenomenalism is false, and his own doctrine true. Like Plato he connects the views of earlier thinkers with the doctrine of Protagoras, but he points out more explicitly the affiliation of the one with the other, tracing them back to a denial in the one case of any permanence in things, and in the other case to a denial of any universality in thought. These two negations, as he argues, rest upon a violation of the first principles of knowledge, which are at the same time first principles of reality. Those principles are mainly these two: (1) that "the same characteristic cannot at once belong and not belong to the same thing in the same relation," and (2) that "all real judgments must be either affirmative or negative." It is in connection with his exposition of these two principles that he is led to examine phenomenalism; and what he is mainly concerned to show is, that in both its forms phenomenalism violates them, and is therefore destructive both of knowledge and of reality.

The phenomenalism of the earliest thinkers, as well as that of Protagoras, Aristotle regards as based upon the assumption that the sensible is the real. Now, sensible things, as those thinkers could not but see, are in continual change; and as in this change opposite characteristics arise, they were led to deny that anything has a definite and unchangeable nature. Nothing, as it seemed to them, can arise from what 'is not,' but only from what 'is'; and therefore we must suppose that the opposite characteristics which things at any time display are actually present in them. But if this union of opposites in the

same thing is admitted, we introduce contradiction into the very nature of things. The principle, that opposite characteristics cannot belong to the same thing, is thus tacitly denied, and with it the possibility of knowledge. We cannot therefore be surprised to find Democritus saying that either nothing is absolutely true, or at least we cannot discover it. Finding the sensible to be in continual change, it was naturally held by those who assumed that reality can only be presented in sense, that nothing could be said about it. The followers of Heraclitus therefore accuse him of not going far enough, when he denied that we can enter the same river twice; what he should have said is, that we cannot enter it even once. A consistent phenomenalism must in fact be speechless; for we cannot possibly name that which even as we name it has changed into something else.

The phenomenalism of Protagoras may be formulated in the proposition that "every opinion or appearance is true" (*τὰ δοκοῦντα πάντα ἐστὶν ἀληθῆ καὶ τὰ φαινόμενα*). Like the doctrines of the early thinkers, it assumes that the sensible is the real. The sensible, however, it is said, has no permanent characteristics, but presents itself differently to different persons and to the same individual at different times. The Protagoreans, therefore, argue that there is no reality but appearance.

Aristotle, then, finds that these two forms of phenomenalism spring from the same root, and equally involve a denial of the first principles of knowledge; in fact, they are correlative aspects of the same falsehood. For, if we say with the one that opposite characteristics are combined in the same thing, or, more definitely, that a thing at once 'is' and 'is not,' it is obvious that we must affirm all

opinions, and therefore contradictory opinions, to be equally true, which is precisely the doctrine of Protagoras. Conversely, if we say that all opinions, and therefore contradictory opinions, are true, we evidently assume that a thing contains opposite characteristics, which is the doctrine of the earlier phenomenalists. Both theories make knowledge in any proper sense impossible, and it will therefore be advisable to examine each of them in turn.

The earlier thinkers, as we have seen, make the assumption that whatever a thing is, it must be all at once. Now, this assumption involves the preconception that permanence is incompatible with change; whereas the truth is, that every finite object is permanent in change. The real nature of a thing is not given in sense, but can only be grasped by thought, because its real nature is revealed only in the totality of the phases through which it passes. We have therefore to distinguish between what a thing is 'potentially' (δυνάμει) and what it is 'actually' (ἐνεργείᾳ). Now, when it is assumed that a thing 'actually' contains within it all the characteristics which it at any time displays, and therefore opposite characteristics, it is overlooked that what a thing is 'potentially' it is not yet 'actually.' The acorn is the oak 'potentially,' but the acorn does not 'actually' contain in itself all the characteristics by which the oak is determined. The earlier thinkers were unable to see how that which 'is' could arise from that which 'is not.' What misled them was the consideration that nothing 'real' can arise out of 'non-entity.' This is perfectly true, but it is also true—and this is what they entirely overlooked—that what 'is' arises from that which 'is not' *actually*, but can only be said to 'be' *potentially*. Failing to grasp this distinction,

they were led to affirm the actual combination of opposites in the same thing, a doctrine which logically leads to the conclusion that nothing whatever has any determinate nature. Now, if nothing has a determinate nature, we can make no real judgments, because whatever we affirm of a thing may be at the same time denied. This form of phenomenalism, therefore, makes all significant speech impossible.

The other form of phenomenalism also denies that things have any determinate nature. Making sensations or rather immediate presentations, even those which occur in dreams, the condition of reality, it concludes that nothing is 'real' but what 'appears,' and thus it abolishes the distinction between the momentary affection and the permanent 'nature' or 'form' of the thing. But every perception is relative to the object perceived, and if we deny all definiteness of the latter, there can be no distinction between the sensation of the moment and the real object. For it is only thought (*νοῦς*) that can grasp the 'formative principle' (*εἶδος*) which is operative in the process through which the thing passes, and which constitutes its actuality. The Protagoreans, assuming the changes of feeling to be the sole criterion of reality, cannot avoid the conclusion that all judgments are equally true, and therefore equally false. Their doctrine, when precisely stated, amounts to this: that what 'appears' is true to the person *to whom* it 'appears,' *when*, *so far as*, and *in the manner in which*, it 'appears.' When thus limited, the doctrine simply means that there is no real nature of things whatever. And as it reduces reality to an infinite number of separate things or 'appearances,' it destroys the possibility of judgment. We must there-

fore conclude that phenomenalism, in both its forms, is inherently self-contradictory. No true theory of knowledge can be based upon a tacit denial of the determinate nature of things and of the fundamental laws of thought. Knowledge proper, or science (ἐπιστήμη), is based upon universal judgments, which express the essential nature of things, and the primary condition of all such judgments is the principle that every judgment must have one definite meaning; with its corollary, that every judgment must either affirm or deny.

II. ARISTOTLE'S DEFINITION OF PHILOSOPHY.[1]

The analysis of Aristotle's criticism of phenomenalism may be fitly supplemented by a statement of the process by which he reaches a positive determination of the problem of philosophy. The fundamental conception which underlies his whole view of things is suggested by the opening words of the *Metaphysics*. "All men," we are told, "have by nature (φύσει) a desire for knowledge."[2] In other words, to strive after a comprehension of reality is characteristic of man or constitutes the highest form of his activity. For to Aristotle the very *existence* of man, as we may say, consists in the realization of his functions. These are an end in themselves, and, when we find out what the highest of his functions

[1] See Chapter i., pp. 2, 3.

[2] Πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. The position of φύσει gives it special emphasis.

is, we have discovered 'what' man is. That the essential nature of man can be completely realized only in the knowledge of reality is manifest from the universal effort after such knowledge; an effort which begins to reveal its deeper meaning even in the first and simplest phase of his conscious life, and in each successive phase discloses more clearly the end which impels it onward from the first. That end is the comprehension of the actual as it is, or a scientific grasp of the first principles of existence. Thus interpreting the conscious life of man, Aristotle proceeds to pass in review the various phases of knowledge, endeavouring to show that these, as they arise out of each other, are the gradual unfolding of that desire for a knowledge of reality which is an expression of man's highest function.[1]

The first form in which this disinterested love of knowledge is manifested is in sensible perception. That even here there is obscurely working that desire for knowledge as an end in itself which is the consummation of human faculty, is indicated by the pleasure which all men take in the perceptions of sense, and especially in the perceptions of sight; for the existence of this pleasure in the mere exercise of a function implies that in the apprehension of the distinctive features of sensible objects, apart from the value of the knowledge thus gained in the satisfaction of our wants, we feel that we are realizing our own nature. Sensible perception is for Aristotle a discriminative faculty (δύναμις κριτική); it is not the mere occurrence of a state of feeling, but contains within it

[1] Met. A, 1, 980ᵃ, 21. Cf. E. N., X. 8, 1178ᵇ, 7, and J. A. Stewart's *Notes on the Nichomachean Ethics of Aristotle*, i. 1-5.

a certain implicit exercise of judgment. Such a faculty is possessed even by the lower animals, and, indeed, is the characteristic mark of the animal as distinguished from the plant; for, while both react upon the external object, the animal does not take the object up into itself, but reproduces in itself its sensible properties. The superiority of the sense of sight consists in the fulness with which it discriminates the 'form' of things, and in this respect it is more theoretical than hearing, though no doubt hearing, as the medium of articulate sounds, incidentally affords a higher degree of knowledge. The especial pleasure, then, which accompanies the exercise of that sense which yields the most complete knowledge of sensible reality shows how strong is our love of knowledge. Thus man, though he shares with the lower animals the faculty of sensible perception, reveals even at this stage the germs of his higher nature; for, unlike them, he enjoys the mere apprehension of things irrespective of its connection with the satisfaction of his immediate wants.[1]

A higher stage of knowledge than sensible perception is reached by man in experience (ἐμπειρία), the transition being effected by the intermediation of memory (μνήμη), which consists in the survival in the soul of an image (φάνταομα) when the sensible object is no longer present. Some of the higher animals have memory, but only man converts various remembrances into a single experience, or at least, as Aristotle cautiously says, "the animals have little experience." The superiority of man arises

[1] Met. A, 1, 980ᵃ, 22-27. Cf. Anal. Post. ii. 19-99ᵇ, 34; De An. ii. 2, 413ᵇ, 1; 426ᵇ, 10; E. N. X. 4, 1174ᵇ, 20.

from his relating or ratiocinative faculty (λόγος), which enables him to grasp what is universal or common in a number of instances. Thus, when we remember that a certain remedy cured Socrates, Callias, and others of a particular disease, we are said to have an 'experience.' It is obvious that we have at this stage advanced a step nearer to the explicit comprehension of the principles or laws of real things.[1]

The desire for knowledge has not yet reached its goal; and therefore experience gives rise to art (τέχνη) and science (ἐπιστήμη), in which there is an explicit consciousness of the universal or law, as freed from its involution in the particular instance and separated from what is accidental and irrelevant.[2] We now grasp the essential nature of a whole class of things. The scientific physician knows the cure for a particular disease, because he has grasped in thought the principle which rules in all particular instances. Thus in art and science our desire for knowledge has led us, not only beyond the ever-changing objects of sensible perception, but even beyond the experience of what is presented in a number of instances, to the universal law which applies to all objects of a certain class; and it is only with the discovery of the universal law that the desire for knowledge attains its end, so far as a particular species of reality is concerned. There is a still higher stage of knowledge, as will immediately appear, but we can at least say that in

[1] Met. A, 1, 980ᵃ, 27-981ᵃ, 2. Cf. Anal. Post. ii. 19, 99ᵇ,-35. De Mem. ii. 451ᵃ, 15.

[2] Aristotle does not here distinguish between art and science, because both involve a knowledge of the universal.

art and science the disinterested love of knowledge attains to a relative satisfaction.[1]

It may indeed be objected, that experience is often more valuable than art. And no doubt this is largely true in practical life, where we have to deal with the particular case, and therefore must discern the universal or law as modified by the circumstances under which it operates. The physician must be able to determine accurately the disease from which a particular man is suffering, and unless he has the skill born of experience he will be unable to effect a cure, however well he may know the theory of medicine. The merely theoretical physician is apt to blunder in his diagnosis, and to display his inferiority to the practical physician, who has had much experience even if he knows little about theory. But, though all this is true, we are justified in regarding art as a higher form of *knowledge* than experience, because it involves a comprehension of the principle which makes the object what it is, and it is only in such comprehension that knowledge attains to its proper form. Estimated by this standard, we regard those who are familiar with the principles of an art as possessed of more 'wisdom' (σοφώτεροι) than those who are limited to experience. We have more respect for the builder who can give a reason for the manner in which every stone is disposed than for the ordinary workman who is a creature of habit and knows no more why he does a certain thing than if he were a lifeless being. The superiority of art over experience is also shown in the fact that, as based upon the knowledge of principles, it

[1] Met. A, 1, 981ᵃ, 2-12. Cf. Anal. Post. ii. 19, 100ᵃ, 6.

can be taught to others, whereas experience is a sort of tact of which its possessor can give no intelligible account.[1]

That the superiority of art and science over experience consists in the knowledge of principles is evident from their contrast to sensible perception. The senses certainly give us our knowledge of particulars, and yet we do not speak of the perceptions of sense as 'wisdom' (σοφία), the reason obviously being that they neither imply an apprehension of what is universal nor an insight into principles. It is therefore probable that he who first advanced beyond the ordinary perceptions of sense to the stage of art was admired, not merely because his discovery was of practical utility, but because he differed from others in the possession of 'wisdom.' This is confirmed by the order in which the various arts arose. Those arts were first discovered which were directly connected with the necessary wants; next came those which ministered to refinement; and last of all were developed such arts as mathematics, which are entirely independent of practical utility. We can thus understand how it happened that mathematics was first cultivated in Egypt, where there was a priestly caste with the abundant leisure essential to the disinterested contemplation of truth.[2]

The whole of the first chapter of the *Metaphysics*, a summary of which has just been given, is a development of the proposition with which Aristotle starts, that "all men have by nature a desire for knowledge." This desire he conceives to be operative in the very beginning of

[1] Met. A, 1, 981ª, 12-ᵇ9.
[2] Met. A, 981ᵇ, 9-982ª, 3.

conscious life, and gradually to free itself from the impure form in which it first appears as it finds its proper object. (*a*) Even in the first phase of knowledge—that of sensible perception—the desire of knowledge for its own sake is not inoperative; it shows itself in the pleasure which accompanies the mere exercise of the senses, and especially the sense of sight, the most purely theoretical of all, irrespective of any relation to our practical needs. (*b*) At the stage of experience we have risen above sensible particulars so far as to have grasped what is common to a number of instances. (*c*) In art the principle or law is freed from the accidents of the individual things in which it operates, and made an explicit object of thought. (*d*) Lastly, in the theoretical arts or sciences the sole object is truth, which is valued purely for itself, and no longer partly as a means to the production of some external object. The conclusion therefore is that man by his very nature has a disinterested love of truth, and that the love of truth can be satisfied only by the knowledge of principles. Aristotle, however, has still in view a higher stage of knowledge—that knowledge which rises above the principles discovered by the special sciences—and his next step is to show how the love of knowledge carries man forward to the comprehension of the first principles of all things, or, in other words, to the purely speculative point of view of metaphysics.

In seeking to define the nature of science in general, Aristotle has traced for himself the various phases through which knowledge passes, as it emerges from its simplest form, attains to relative universality, and finally discerns the principle or law involved in a whole class of things. Now that his aim is to determine the sphere of metaphysics,

or first philosophy, he starts from the conception of the 'wise' man, or philosopher, as it lies embedded in the popular consciousness and is revealed in current judgments. He has still in his mind the idea of the pure or disinterested knowledge of reality as the culmination of man's desire for knowledge, and he now seeks to show that even the popular mind tacitly recognizes that science only reaches its goal in metaphysics. It must be observed, however, that Aristotle does not simply gather together a number of current sayings, but, after his usual manner, tries to find out what underlies and gives them their force; in other words, he sees in them inarticulate expressions of his own idea of philosophy.

The ordinary view of 'wisdom' recognizes that philosophy consists in a knowledge of the universal; but if this is true, First Philosophy must deal with that which in the strictest sense of the term is universal; in other words, with the presuppositions of *all* reality. The popular mind also sees that philosophy is at the other extreme from sensible perception; and, if we follow out this idea, we shall conclude that First Philosophy deals with the last stage of knowledge, that stage in which the desire for knowledge has reached its final form. It is also held that philosophy consists in that knowledge which is indubitable, and such knowledge must be based upon insight into the 'reason why' reality cannot be otherwise than it is. And, finally, philosophy is held to be that science which is absolutely disinterested, and contains the ultimate principles of things, or, what is the same thing, which grasps the meaning of each form of reality as viewed in organic connection with the whole. Thus, by following out the implications of current ideas as to the nature of philosophy,

Aristotle reaches the conception of metaphysics as the science which contains the universal, rational, indubitable and ultimate principles of reality.[1]

Turning now to philosophy itself, Aristotle finds in its origin further confirmation of his fundamental idea that it is the ultimate form of that pure love of knowledge which is characteristic of man. For, how did philosophy arise? It was born of wonder, that curiously mixed feeling which arises from inability to comprehend what yet is felt to be somehow comprehensible. At first men were unable to explain the apparent contradiction in objects lying around them, and later they tried to account for the strange movements of more remote objects—the sun, moon, and stars—and for the origin of all things. Wonder is accompanied by the consciousness of ignorance, and thus it leads to the desire for knowledge. To this desire a provisional satisfaction is given in the myth; for, as the myth at once gives expression to the feeling of wonder and contains an imaginative theory of the world, we may say that the lover of myth (φιλόμυθος) is, in a sense, a lover of wisdom or philosopher (φιλόσοφος). If, therefore, philosophy took its rise in the effort to escape from ignorance, it is evident that the impulse to philosophy is a desire for knowledge itself, not for knowledge as a means of satisfying our practical needs. This conclusion is confirmed by the historical fact already referred to, that the pursuit of knowledge for its own sake arose only after provision had been made for the necessary wants and even the comforts and refinements of life. Just as the free man is self-sufficient and independent of others,

[1] Met. A, 2, 985ª 4–ᵇ 7.

so philosophy is the only free science, for it alone is an end in itself. It may even seem that such a liberation from the pressure of practical life is beyond the reach of man, and is reserved for God alone. But this idea rests upon the old falsehood of the envy of the gods; and we must rather hold that philosophy is divine, both because in it man lives a god-like life of pure contemplation and because its ultimate object is God, the source and explanation of all reality. Thus First Philosophy or metaphysics lifts us above the unhappy state of wonder and convinces us that from an ultimate or divine point of view the world could not be otherwise than it is.[1] Aristotle therefore defines philosophy as "the science of reality as such (τὸ ὄν ᾗ ὄν) and the characteristics inseparable from reality," thus marking it off from such special sciences as mathematics, which concentrate their attention upon a part of reality, and go on to determine the characteristics of this part.[2]

III. AGNOSTICISM AND SCEPTICISM.[3]

The distinction between agnosticism and scepticism is not very clearly marked, but we may say that the former does not deny all knowledge, but only knowledge of absolute reality, while the latter professes to deny all knowledge. The one bases its denial upon the limitation of human knowledge to phenomena, the other upon the

[1] Met. A, 2, 982[b] 11–983[a] 23.
[2] Met. Γ, 1, 1003[b] 21.
[3] This Note is supplementary to Chapter ii.

asserted subjectivity of all human judgments, no matter what their object may be. Logically, however, agnosticism results in scepticism; for, if nothing can come within the sphere of knowledge except the phenomenal, all our judgments must be subjective. On the other hand, scepticism, as has often been pointed out, assumes that it is itself true, and so far it is dogmatic. A consistent scepticism would be sceptical even of the truth of its own scepticism, and as it would then neither affirm nor deny nor even doubt, it would be simply without meaning; for no one can affirm, deny, or doubt if there is nothing affirmed, denied, or doubted. Scepticism, as a philosophical theory, has therefore practically come to mean the denial of all objective judgments about reality. As this form of scepticism has recently found an exponent in Mr. Alfred Sidgwick, who would probably object to be classed as an agnostic, it seems advisable to inquire whether the objections raised in the text to agnosticism do or do not apply to scepticism as thus understood.

"What is the reason," asks Mr. Sidgwick, "why those who claim to possess some unconditional knowledge of reality seek to avoid an encounter with the sceptic? Why are they still content to assume that the only sceptical opponent they have to face is either one who professes to know that 'reality is such that our knowledge cannot reach it,' or else one who 'condemns all reflexion' —or, at any rate, careful reflexion—'on the essence of things?'"[1]

It would seem, from this passage, that the writer (1) is doubtful whether there is any 'unconditional knowledge

[1] *Mind*, N.S., iii. 336.

of reality'; but (2), unlike the agnostic, he refuses to say whether or not 'reality is such that our knowledge cannot reach it.' In short, he neither denies nor affirms that reality can be known, but contents himself with calling upon those who claim to know reality to prove their case. The "genuine sceptical question," he tells us, "is this: What do you mean, and what test of its truth would you allow?"[1] In other words, any one who claims to know what reality is must be able to state in clear and intelligible language what he understands by 'reality,' and he must be willing to meet the objections which may be raised to its knowability. So far no one, I think, would object to what Mr. Sidgwick demands in the name of scepticism; though it might fairly be objected that such a guarded attitude is not, in any proper sense, distinctive of scepticism; it is in fact the claim of a rational being to be convinced by reason. It soon becomes apparent, however, that Mr. Sidgwick means much more than this. Like other professed sceptics he has a very positive conviction that 'reality' cannot be known. "The picture of reality obeying the laws of human thought is," he says, "as evidently anthropomorphic as any of the other now discarded pictures of the Deity. It is true that an inconsistent reality is not intelligible to us; but that is perhaps a reason why we should confess our failure to understand it."[2] If these words mean anything, they surely mean that there *is* 'reality,' but that we cannot determine its nature, because to it 'the laws of human thought' are not applicable. It is further implied that one of these 'laws' is the law of self-consistency. I am somewhat

[1] *Ibid.* 336. [2] *Ibid.* p. 338.

puzzled, however, by the hypothetical way in which the writer states his conclusion: he does not say outright that we cannot 'understand' reality, but only that 'perhaps' we do not understand it. Why 'perhaps'? If the 'laws of human thought,' including the law of non-contradiction, are 'anthropomorphic,' how can there be any doubt of their inapplicability to reality? Why, then, is it not maintained without reservation that we do not 'understand' reality? Does the sceptical attitude require us to doubt whether 'the laws of human thought' are, or are not, applicable to it? A genuine scepticism would certainly be sceptical of all 'laws'; but this does not seem to be the view of Mr. Sidgwick, or he would have said that 'the laws of human thought' are 'perhaps' as 'anthropomorphic as any of the other now discarded pictures of the Deity,' whereas he announces, with perfect confidence, that these 'laws' are 'evidently anthropomorphic.' Now, it seems to me that what is thus affirmed with such absolute confidence is by no means so 'evident' as the writer seems to imagine. What is here meant by 'anthropomorphic'? Were it proved that there are 'laws' which are *peculiar* to the human intelligence, no doubt we should fall into an indefensible form of anthropomorphism, if we spoke of reality as 'obeying the laws of human thought.' But no one who maintains the knowability of reality could consistently adopt this view: on the contrary, it is only those theories that oppose the phenomenal and the real which distinguish between the laws of the human intelligence and the nature of reality. And this is Mr. Sidgwick's own view; for he tells us that the laws of human thought are not applicable to reality. The idealist view, on the other hand, is that there are no 'laws'

peculiar to 'human thought'; that the opposition of 'human thought' to a thought different in kind has no meaning; and, in fact, that any opposition between reality as it is and reality as it is thought is ultimately self-contradictory, since for us there is no possible reality except that which is thought.

The charge of 'anthropomorphism' therefore recoils upon the exponent of scepticism. But, even apart from this defect, Mr. Sidgwick's position seems to be suicidal. He objects to be classed among those who 'profess to know that reality is such that our knowledge cannot reach it.' Yet, surely, if he holds that 'the laws of human thought' are not applicable to reality, he must deny that we have a knowledge of reality. Mr. Sidgwick quotes with approval Mr. Bradley's remark that "science is a poor thing if measured by the wealth of the real universe." The remark is appropriate in the mouth of Mr. Bradley, who claims that we have to a certain extent indubitable knowledge of reality; but it is difficult to see how it can consistently be made by one who declares the 'laws of human thought' to be inapplicable to the 'real universe.' If we know nothing of the 'real universe,' how can we tell whether it is richer or poorer than what 'science' reveals to us? One would rather have supposed that, for aught we can tell, the 'real universe' may be comparable to a mad dream: it is, in fact, difficult to understand what else it can possibly be for one who finds nothing impossible in an 'inconsistent reality,' *i.e.*, a reality which, as 'not intelligible to us,' must be for us the negation of the intelligible.

We have thus found the most recent exponent of scepticism basing his doubt of the doctrine, which maintains the

knowability of the absolute, upon the dogmatic assumption of a reality to which 'the laws of human thought' are inapplicable—as indeed they may well be, when reality is conceived as possibly 'inconsistent.' If Idealism is to be overthrown, it will have to be assailed by some other weapon than this. But perhaps Mr. Sidgwick is stronger in attack than when he tries to tell us the nature of that reality which he does *not* know. "What is the reason," he asks, "why those who claim to possess some unconditional knowledge of reality seek to avoid an encounter with the sceptic?" The meaning of this question, which is by no means clear, seems to be explained by another of the writer's dogmatic assertions. "To profess that a piece of knowledge is unconditional, and at the same time to admit that it is in any respect incomplete, is a contradiction."[1] It appears from this very confident utterance that, when the writer speaks of 'unconditional knowledge,' he means 'knowledge which is not in any respect incomplete.' His question therefore is: "What is the reason why those who claim to possess *absolutely complete* knowledge seek to avoid an encounter with the sceptic?" Are there thinkers who make this preposterous claim? Mr. Sidgwick will certainly not find any representative of this class among sane men. What is claimed is not an *absolutely complete knowledge* of reality, but a knowledge that *reality is absolutely complete*, which is a very different thing. It thus turns out that Mr. Sidgwick has merely repeated in other words the old confusion between *complete* and *absolute* knowledge, a confusion with which we have already dealt.[2] The sceptic who assumes the truth of his denial of any absolute

[1] *Ibid.* p. 337. [2] See pp. 37 ff.

or unconditional judgment must admit that here at least he has a 'piece of knowledge which is unconditional,' even if he denies all other 'unconditional' judgments. Why should it be inadmissible for the idealist to assume that which is the basis of any judgment whatever? This of course does not prove that we can determine the nature of the absolute, but it shows that the possibility of such a determination cannot be disproved *in limine* by the well-worn fallacy that the claim to have an 'unconditional' judgment—which merely means a *true* judgment—involves a claim to omniscience. There is nothing absurd in saying that the absolute is a self-conscious and self-determining intelligence, if it can be shown that every other conception of it contradicts the fundamental principle, that nothing can be in the absolute sense true which is incompatible with the possibility of any judgment whatever.

To avoid misunderstanding, it may be well to add that scepticism assumes a different form and has a deeper meaning when it is viewed merely as a stage in the process by which higher truth is reached. When Mr. Bradley, for example, speaks of a "sceptical study of first principles," he means the process in which it is shown that certain ways of conceiving reality which put forward a claim to be ultimate have no right to the claim, as is shown by the fact that, when they are so regarded, they contradict themselves. Scepticism, in this sense, is the negative side in the process of framing an adequate conception of the true meaning of the world, and derives its force from the comprehension of a principle in which the sceptical attitude is transformed into positive insight. Dogmatic systems of philosophy see only the positive side of this process, sceptical systems only the negative side, speculative philo-

sophy sees both in their correlation. An adequate system of philosophy is therefore neither dogmatic nor sceptical, but constructive: it is a rational system in which all the conceptions by which reality is grasped are viewed in their orderly connection, as illuminated by that conception —or 'Idea,' as Hegel calls it, with a tacit reference to the Platonic ἰδέα or εἶδος and the Kantian *Idee*—which is presupposed in all, but is only explicitly known as the final result of the whole process.

IV. MATHEMATICAL KNOWLEDGE.[1]

A. LOCKE'S THEORY OF MATHEMATICS.

HISTORICALLY Mill's view of mathematics is the outcome of the doctrines successively developed by Locke, Berkeley, and Hume. The discussion in the text will therefore receive some additional illustration from a consideration of the doctrines of these thinkers.

The peculiarity of Locke's theory of mathematical knowledge is that he regards it as containing universal and necessary propositions, which are due to the mind itself, and yet are applicable to real things. In assigning this unique position to it, he is neither consistent with himself nor in agreement with later empiricists like Mill. Knowledge is defined by him to be "the perception of the agreement or disagreement of any of our ideas."[2] The 'ideas' which are thus perceived to agree or disagree

[1] Supplementary to Chapters iii. and iv.

[2] *Essay concerning Human Understanding*, iv. 1. 1.

are either (*a*) 'the simple ideas which are all from things themselves, and of which the mind can have no more or other than what are suggested to it,' or (*b*) the 'complex ideas which are the workmanship of the mind.' The latter, again, are ideas of *modes*, *substances*, or *relations*. Thus, 'gratitude' is a 'mode,' 'man' or 'horse' is a 'substance,' while 'greater and less,' 'cause and effect,' are 'relations.'[1] So far there seems to be a clear distinction between 'simple ideas' or sensations, as produced in us by real things, and 'complex ideas,' which are the product of the mind's own operations. A difficulty, however, arises from Locke's view that "the mind knows not things immediately, but only by the introduction of the *ideas* it has of them";[2] for, on this view, knowledge is possible only if there is a "conformity between our ideas and the reality of things." As Locke himself puts it: "How shall the mind, when it perceives nothing but its own ideas, know that they agree with things themselves?" The objection may also be raised that knowledge cannot be the mere 'perception of the agreement or disagreement of our ideas,' since it would seem to follow that whenever we perceive the agreement or disagreement of two ideas we must have knowledge. Are we to say, then, that any one who has the ideas of a harpy and a centaur, and perceives the 'agreement' of each with itself, and its 'disagreement' with the other, has real knowledge? No one would maintain that a harpy or a centaur exists *in rerum natura*: how then are we to distinguish between that 'perception of the agreement or disagreement of ideas' which yields real knowledge and that which does not?[3]

[1] *Ibid.* ii. 12. [2] *Ibid.* iv. 4. 3. [3] *Ibid.* iv. 4. 1.

This difficulty Locke does not regard as insuperable. (1) We have certain 'simple ideas' or sensations, which, as passively received by the mind, 'must necessarily be the product of things operating on the mind in a natural way.' These we can neither make nor unmake, and therefore they must be regarded as caused by real objects external to the mind. It is true that there is nothing in the object precisely corresponding to such 'simple ideas' or sensations as 'whiteness' or 'bitterness,' but there is in the object a 'power' to produce such ideas in us, and, therefore, there is a conformity between such 'simple ideas' and the real nature of things. Locke, however, is compelled to admit that this kind of knowledge, which he calls the 'sensitive knowledge of particular existence,' is not entirely free from doubt. We cannot possibly doubt that the 'idea' of an external object is identical with itself, because here our knowledge is direct or 'intuitive.' When we have the idea of 'white,' we cannot fail to perceive that it is 'white' and not 'black.' This direct or 'intuitive' knowledge, however, we do not possess of the correspondence between our idea of 'white' and the external object which we believe to produce it, and therefore our knowledge of the existence of the object has not the same degree of certainty as the 'intuitive' knowledge of our own ideas. We have, however, Locke contends, the greatest 'assurance' that our simple ideas of sensation are produced by 'exterior causes affecting our senses.'

(2) Besides these 'simple ideas' we have 'complex ideas' of individual substances. Now, in this case, there is a possibility that our ideas may differ from their 'archetypes,' and may 'come short of being real,' either

because the collection of simple ideas in the mind may not correspond to the actual union of qualities in the thing, or because the object is more complex than it is represented to be. As copies or 'ectypes,' our complex ideas of substances must either be a full and accurate counterpart of the 'archetype,' or we shall fail of real knowledge. We do not know the real constitution of the substances, or what is the cause of the union or separation of their qualities, and therefore we can tell nothing about the real nature of things except what we learn from experience and observation. Real knowledge of substances is therefore dependent upon the perception of the co-existence of ideas of sensation. When certain simple ideas have been given together, then, as we may be sure, our knowledge is real so far as it goes, though it never goes very far.[1]

In this account of the knowledge of individual substances Locke speaks as if perception revealed to us the existence of permanent objects; failure in knowledge being due either to a wrong combination of simple ideas or to incompleteness in the number of these ideas. In the course of his inquiry, however, he is led to admit that the knowledge given to us in perception does not extend beyond the moment in which we actually have the perception. "Seeing water at this instant, it is an unquestionable truth to me, that water doth exist; . . . but being now quite out of sight of the water, it is not certainly known to me that the water doth now exist."[2] When I actually have the 'collection of simple ideas' called 'man,' I cannot doubt that the man exists; but

[1] *Ibid.* iv. 4. 11. 12. [2] *Ibid.* iv. 11. 11.

with the disappearance of the perception, the certainty of his existence is gone, "since there is no necessary connection of his existence a minute since with his existence now."[1] Perception, in other words, merely reveals to us a particular combination of predicates in a particular subject at a particular moment. Abstract or general ideas, on the other hand, are the product of the mind's own activity. Whereas the collection of simple ideas which constitutes a perception is the product of a particular object now and here present, an abstract idea is formed by comparing together a number of such perceptions, and abstracting from "the circumstances of time and place, and any other idea that may determine them, to this or that particular existence." The 'essence' of a class of things is simply an 'abstract idea' based upon the resemblances of things to one another. We have, therefore, to distinguish between the 'real' and the 'nominal essence,' *i.e.*, between the actual constitution of a thing and the abstract idea formed by the mind. Since we cannot predicate of a substance any attributes except those guaranteed by the perception of the moment, all real judgments are singular. General propositions merely state what is contained in an abstract idea, or they are purely analytical. Adding nothing to knowledge, they are 'trifling' or 'uninstructive.' To say, *e.g.*, that 'gold is soluble in aqua regia' merely means that in my idea of 'gold' there is contained the attribute of 'solubility in aqua regia.' On the other hand, the proposition, "This piece of gold is soluble in aqua regia," is a real or 'instructive' proposition, because it states an

[1] *Ibid.* iv. 11. 9.

actual fact of perception. On this view there can be no 'general propositions' on matters of fact, but only singular propositions, and, strictly speaking, only singular propositions in regard to what is actually present here and now. It is, therefore, not surprising that Locke should "suspect a science of nature to be impossible." There can be no 'science of nature' unless universal propositions are possible, and Locke's doctrine makes all such propositions impossible.

(3) There is another class of 'complex ideas,' which are put upon a different footing from those of substances. The possible failure of knowledge in the case of the latter arises from their relation to real things, which are their 'archetypes.' The 'complex ideas' employed in the mathematical and moral sciences, on the other hand, have no 'archetypes,' and therefore they cannot distort or fall short of their 'originals.' They cannot *misrepresent* things, because they do *represent* them. Here, therefore, knowledge is strictly limited to ideas themselves as combined by the mind in a free act of construction, and hence we can be absolutely certain that "all the knowledge we attain concerning these ideas is real, and reaches things themselves."[1] Locke therefore holds that mathematical propositions are at once 'general' and 'instructive.' They are 'general' because they rest upon ideas which are always identical with themselves, and they are 'instructive' because the predicate contains what can be deduced from the subject but is not already contained in it.[2] Thus, starting from the idea of a triangle, the mathematician proceeds to show that it contains two right angles. He considers the truth and

[1] *Ibid.* iv. 4. 5. [2] *Ibid.* iv. 8. 8.

properties belonging to the triangle "only as they are in idea in his own mind," for "it is possible he never found it existing mathematically, *i.e.*, precisely true in his life." Locke contends, however, that the knowledge thus obtained is "true and certain even of real things existing, because real things are no further concerned, nor intended to be meant by any such propositions, than as things really agree to those archetypes in his mind. Is it true of the idea of a triangle, that its three angles are equal to two right ones? It is true also of a triangle, wherever it really exists. Whatever other figure exists, that is not exactly answerable to that idea of a triangle in his mind, is not at all concerned in that proposition. And therefore he is certain all his knowledge concerning such ideas is real knowledge; because intending things no farther than they agree with those his ideas, he is sure what he knows concerning those figures, when they have barely *an ideal existence* in his mind, will hold true of them also, when they have a real existence in matter; his consideration being barely of those figures, which are the same, wherever, or however, they exist."[1]

B. BERKELEY'S THEORY OF MATHEMATICS.

Locke, as we have seen, finds that we obtain a knowledge of external things only by the 'intervention' of ideas; but he regards the reality of those things as guaranteed to us by the fact that, as we cannot make them for ourselves, they must be produced in us by things without us. This explanation, however, does not get rid of the difficulty raised by Locke himself in connection with his definition of knowledge as the 'perception of the agree-

[1] *Ibid.* iv. 4. 6.

ment or disagreement of any of our ideas.' The external thing which is said to produce our ideas does not fall within, but without the mind, and therefore it is not known; or if it is known, it can only be because the ideas of sensation within the mind are referred to something beyond the mind. Such a reference of simple ideas to that which is distinct from them must be due to the activity of the mind itself, and as such it involves the superinduction upon sensation of something not belonging to sensation itself. But, if ideas of sensation have thus to be interpreted by the mind before they can be regarded as revealing to us a real object, it cannot be true that they give us a knowledge of the object. To be consistent with himself Locke must therefore either deny that there is any real object distinct from sensation, or he must admit that reality cannot be revealed to us except by the combination of sensation and thought. The former was the view which Berkeley adopted in his earlier writings, the latter the view elaborated by Kant.

What Berkeley, then, in his first mind, attempts, is to apply consistently the doctrine of Locke, that knowledge is the "perception of the agreement or disagreement of our ideas." The reality of an object lying beyond the mind is a pure fiction. We cannot possibly go beyond our own 'ideas,' and 'ideas' can have no existence except for a conscious subject. With this exclusion of any independent external reality, the difficulty arises of distinguishing between reality and fiction. This difficulty Locke tried to solve by assuming that simple ideas of sensation are known as the product of external things, while fictions are the products of the mind's own activity. Berkeley, having discarded external things, must find in ideas themselves the

distinction between reality and unreality. How, then, he asked, can we discriminate between real and fictitious ideas? The answer was suggested by Locke's view that simple ideas of sensation are not produced by the mind, whereas fictions are the product of the mind itself. "It is no more than willing," Berkeley tells us, "and straightway this or that idea arises in my fancy; and by the same power it is obliterated and makes way for another." But "when in broad daylight I open my eyes, it is not in my power to choose whether I shall see or no, or to determine what particular objects shall present themselves to my view." Moreover, "the ideas of sense are more strong, lively, and distinct than those of the imagination; they have likewise a steadiness, order, and coherence, and are not excited at random, as those which are the effects of human wills often are, but in a regular train and series."[1] Berkeley, then, finds in ideas of sensation themselves the criterion by which they are distinguished from mere fancies. Like Locke, however, he regards the former as effects in the percipient subject of a cause distinct from it. With Locke the proximate cause was body, the ultimate cause the Divine Will; Berkeley, denying the existence of matter, refers them to God as their cause, by whom they are directly produced in us without the intermediation of body.

Having thus identified the real with ideas of sensation, Berkeley has to explain the possibility of science, which, as he admits, must be based upon 'universal' ideas.[2] Locke sought to preserve the reality of mathematical knowledge by maintaining that it is based upon 'abstract ideas,' which are constructed purely by the

[1] *Principles*, 28-30. [2] *Principles: Intro.*, 15.

mind itself, so that the propositions derived from them are at once 'general' and 'instructive.' This doctrine Berkeley rejects. The assumption that there are 'abstract ideas' he regards as the main source of error in philosophy.[1] It is universally admitted, he says, that the qualities or modes of things never *really exist*, except as mixed or blended together in the same object; but we are told that the mind is able to *consider* each quality separately, and thus to frame for itself an abstract idea of the quality in question.[2] Similarly, the mind attains to abstract ideas of concrete things by abstracting from the circumstances and differences which determine them to a particular existence, and retaining only what is common to all. In this way, *e.g.*, we are said to form the 'abstract idea' of 'man' in general, containing the idea of colour, stature, etc., but not of any particular colour, or of any particular stature.[3] Such an 'abstract idea' of 'man' Berkeley professes himself unable to form. "The idea of man that I frame to myself must be either of a white, or a black, or a tawny, a straight, or a crooked, a tall, or a low, or a middle-sized man. I cannot by any effort of thought conceive the *abstract* idea of 'man.' . . . I deny that I can abstract from one another, or conceive separately, those qualities which it is impossible should exist so separated; or that I can frame a general notion, by abstracting from particulars in the manner aforesaid."[4] We cannot, *e.g.*, conceive of motion in abstraction from the body moved, the figure it describes, and its particular direction and velocity; nor of 'man,' as distinguished from Peter, James, and John.

[1] *Ibid.* 6. [2] *Ibid.* 7.
[3] *Ibid.* 9. [4] *Ibid.* 10.

What Berkeley here says is apt to suggest that he is contending for the existence of things, as having a determinate nature, in contrast to mere abstractions, which separate what is really combined and inseparable. We must remember, however, that, on his view, the contrast is not between real things and abstractions, but between particular perceptions and abstract ideas, and therefore what his doctrine affirms is that all real ideas are particular in their own nature, while 'abstract ideas' are merely fictions of abstraction to which no reality whatever corresponds. Now, if every real idea is an idea of sensation, the difficulty arises that it exists only at the particular moment in which it presents itself to the individual subject. What, then, is meant by the proposition that "the interior angles of a triangle are equal to two right angles"? Berkeley's answer is as follows. The triangle which the mathematician has before his mind is particular and definite; it is not the 'abstract idea' of a triangle which is neither isosceles, equilateral, nor scalene, for no such idea is conceivable. Nevertheless the mathematician, when he proves that this particular triangle contains two right angles, reaches a conclusion which applies to all possible triangles. "It is, I know," he says, "a point much insisted on, that all knowledge and demonstration are about universal notions, to which I fully agree; but then it does not appear to me that those notions are formed by abstraction—*universality*, so far as I can comprehend, not consisting in the absolute positive nature or conception of anything, but in the relation it bears to the particulars signified or represented by it; by virtue whereof it is that things, names, or notions, being in their own nature *particular*,

are rendered universal. Thus, when I demonstrate any proposition concerning triangles, it is to be supposed that I have in view the universal idea of a triangle; which is not to be understood as if I could frame an idea of a triangle which was neither equilateral, nor scalenon, nor equicrural; but only that the particular triangle I consider, whether of this or that sort it matters not, doth equally stand for and represent all rectilineal triangles whatsoever, and is *in that sense universal.*"[1] To the objection that we cannot know that the particular triangle 'stands for or represents' all triangles, unless we are either (*a*) dealing with the 'abstract idea' of a triangle, or (*b*) 'make a particular demonstration for every particular triangle,' Berkeley answers that "a man may consider a figure merely as triangular, without attending to the particular qualities of the angles, or relations of the sides."[2] In other words, the mathematician has before him a particular sensible triangle, not an 'abstract idea'; but he attends solely to its triangularity, leaving all other properties out of account.

The mathematical doctrine of Berkeley is partly in advance of the doctrine of Locke, and partly fails to do justice to it. Locke was led by a true instinct when he maintained that mathematics is 'barely ideal,' for what was mainly operative in his mind was the conviction that it does not rest upon particular ideas of sensation, but upon objects which exist only for thought. Berkeley, on the other hand, rejects this view, because he sees that there are no 'abstract ideas,' such as Locke, following the traditional logic of the schools, supposed

[1] *Ibid.* 15. [2] *Ibid.* 16.

to be the subject of mathematical propositions; but, though he detected the weakness of Locke's doctrine, he failed to do justice to its strength. It is true that there are no 'abstract ideas' as these are ordinarily maintained, and yet it is true that mathematics rests upon 'universals' which exist only for thought. Berkeley, in his attempt to reach a more consistent doctrine on the lines of Locke's sensationalism, thus fails to do justice to the higher side of his master's doctrine. He clearly saw that, if our knowledge of spatial objects is dependent upon immediate ideas of sensation, we must discard the supposed external object as a fiction of abstraction; but, in thus rejecting the fictitious 'substratum' of Locke, he at the same time makes the knowledge of reality impossible. What gave force to Locke's view was the conviction that reality cannot be the arbitrary product of the individual subject, but has a fixed nature of its own, which must be grasped by the subject if he is to have real knowledge. Berkeley was right in maintaining that reality cannot be something lying beyond the mind, but must be essentially relative to the mind; but, following Locke just where he was weakest, he confused this truth with the very different proposition that reality is present only in the immediate states of the percipient subject. These 'states' are no doubt real, in the sense that they exist for an individual subject at a particular time, but their reality as knowledge involves the consciousness of the objective or permanent nature of the world, apart from which they have no meaning. Failing to distinguish between (*a*) particular states of the individual subject as occurring in succession, and (*b*) the consciousness of determinate objects, Berkeley, when

he comes to treat of mathematical knowledge, attributes to the conceived object what is true only of the particular state, and to the particular state what is true only of the conceived object. He falls into the former mistake when he speaks of a triangle as 'in its own nature *particular*.' If a triangle were a particular sensible impression, occurring at a particular moment, Berkeley would be right; for a sensible impression as such exists only in the moment when it is felt. But, if this were really the nature of the triangle with which the mathematician deals, it would not have the permanence which he attributes to it. What Berkeley has in his mind, when he calls the triangle 'in its own nature particular,' is a confused idea, in which the *particularity* of a feeling is not discriminated from the *individuality* of a conception. He supposes that a triangle is an image, and yet has a permanent nature. The truth is that a triangle is not an image at all, but the determinate conception of three straight lines enclosing a space, a conception which presupposes the unchangeable character of spatial relations. Berkeley, thus confusing the individual or determinate object of thought with a sensible image, supposes that it is 'particular' in its 'existence,' *i.e.*, is the present state of an individual sensitive subject. But an individual triangle has no 'particular' existence, if by that is meant a place in the succession of feelings; its 'existence' is purely that of certain permanent relations of spatial reality as grasped by thought. The individual triangle is therefore the conception of a determinate universal: it cannot be what it is except as involving fixed relations. Hence, when it is proved that the conception of a determinate triangle involves the conception of the

equality of its angles with two right angles, it is at the same time proved that *all* triangles have the same characteristic. The proof of the latter proposition does not depend upon the *resemblance* of one triangle to another, but upon *identity* in the conception of any triangle whatever.

Berkeley's first mistake, therefore, is in confusing a conceived object with a particular feeling. And this leads to a second mistake,—that of attributing to feeling what is true only of a conceived object. Berkeley rightly denies that there are 'abstract ideas' such as Locke maintained. The whole doctrine from which the ordinary view of abstraction results rests upon the false assumption that perception without thought gives us a knowledge of concrete things, and that thought consists in the elimination of differences. The truth, however, is that perception is the first comprehension by the thinking subject of the actual determinations of the world as spatial and temporal, and therefore involves at once differentiation and integration. The 'abstract idea' of the formal logician is merely the aspect of integration taken by itself, or the mere possibility of determinate conceptions. Real knowledge, however, consists in a connected system of concrete conceptions, which in fact are not separate 'ideas,' but stages of thought in the progressive comprehension of the real world. When Berkeley discards the 'abstract idea' of triangle as a tissue of contradictions, he imagines he has shown that mathematics starts from a particular image present to the subject at a particular time, and then goes on to treat this image as 'standing for' or 'representing' all images which resemble it in a certain point. But, as we have seen, a triangle is not

an image at all, but the conception of a certain determination of the spatial world; it is an individualized universal, *identical* with every other individualized universal which contains the determination of triangularity. Every conception of a triangle is at once individual and universal: individual as determinate, universal as containing a permanent characteristic without which no triangle is conceivable at all. No doubt we must have the conception at a certain time; but this is irrelevant, because mathematics deals with the content of the conception, not with the time when any individual has it before his consciousness, and because it is always conceived in the same way. The basis, then, of the universal judgment: "All triangles contain two right angles," is not the resemblance of a particular feeling or image to others, but the identical nature of every conception of triangle. The particular feeling is not in itself an object of knowledge, and the actual object, as conceived, is already determined as universal, and therefore does not receive its universality by being compared with other objects of the same type.

C. HUME'S THEORY OF MATHEMATICS.

We have seen how Berkeley rejected the material 'substrate' of Locke, and thus at once made his predecessor's doctrine more consistent with itself, and took from it the support which it owed to a tacit assumption that 'simple ideas' of sensation reveal to us a real object external to the mind. This was a gain in philosophical clearness; for, when it is seen that sensations cannot

report the existence of any object independent of them, the attempt must be made to distinguish the real from the fictitious without going beyond the contents of consciousness. Berkeley, therefore, catching up the suggestion of Locke, sought to show that real perceptions differ from products of the imagination (1) in being given to the mind, not produced by it, (2) in possessing greater strength, liveliness and distinctness, (3) in the regular order in which they arise in the mind. All ideas being thus 'in their own nature particular,' Berkeley had to explain the universal judgments of mathematics, while maintaining that the subject of such judgments is particular. Failing to appreciate the importance of Locke's view that mathematical ideas are 'barely ideal,' and rejecting the 'abstract ideas' of the schools, which Locke had endorsed, he maintained that the universal judgments of mathematics arise from taking a particular idea as the symbol or representation of all other particular ideas which agree with it in a certain essential feature; and in this way he seemed to preserve the particularity of ideas, while accounting for universal mathematical judgments. Now, Hume, with his strong instinct for consistency, accepts the conclusions of Berkeley so far as these are a development of the doctrine of Locke that all ideas are 'particular in their existence,' but he refuses to admit that there are any universal judgments whatever. All ideas—or all 'perceptions,' as he calls them—are particular, and there are no 'general ideas' in any sense, not even in the sense of Berkeley. The distinction between sensations or 'impressions' and all other modes of consciousness, called by Hume 'ideas,' consists in (1) their priority in time, (2) their greater degree of

liveliness or vivacity, (3) the comparative regularity in which they occur. So far Hume agrees with Berkeley. He is also at one with Berkeley in denying that there are any 'abstract ideas,' but he refuses to admit that mathematical propositions consist in the symbolical relation in which a particular idea stands towards other ideas, maintaining that these propositions may be shown to consist in 'custom,' *i.e.*, in the habitual sequence of certain particular ideas upon another idea which suggests them.

Berkeley denied that there are any 'abstract ideas,' either of (*a*) qualities, or (*b*) concrete things. Hume agrees with him, but goes on to show that there are not even 'general ideas' such as Berkeley seemed to find in the relation of ideas to one another. (*a*) "The mind would never have dreamed," he says, "of distinguishing a figure from the body figured, as being in reality neither distinguishable, nor different, nor separable; did it not observe, that even in this simplicity there might be contained many different resemblances and relations. Thus when a globe of white marble is presented, we receive only the impression of a white colour disposed in a certain form, nor are we able to separate and distinguish the colour from the form. But observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances, in what formerly seemed, and really is, perfectly inseparable. . . . A person, who desires us to consider the figure of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we should consider the colour and figure together, but still keep in our eye the

resemblance to the globe of black marble, or that to any other globe of whatever colour or substance."[1] What Hume here contends is, that each presentation is individual, and that the resemblances which we afterwards discover do not belong to the separate presentations, but to the external comparison of these with one another. (*b*) "When we have found a resemblance among several objects, that often occur to us, we apply the same name to all of them . . . whatever differences may appear among them. After we have acquired a custom of this kind, the hearing of that name revives the idea of one of these objects, and makes the imagination conceive it with all its particular circumstances and proportions. But as the same word is supposed to have been frequently applied to other individuals, that are different in many respects from that idea, which is immediately present to the mind; the word not being able to revive the idea of all these individuals, but only touches the soul, if I may be allowed so to speak, and revives that custom, which we have acquired by surveying them. They are not really and in fact present to the mind, but only in power. . . . The word raises up an individual idea, along with a certain custom; and that custom produces any other individual one, for which we may have occasion. . . . Thus should we mention the word triangle, and form the idea of a particular equilateral one to correspond to it, and should we afterwards assert, *that the three angles of a triangle are equal to each other*, the other individuals of a scalenum and isosceles, which we overlooked at first, immediately crowd in upon us, and make us perceive the falsehood of

[1] *Treatise on Human Nature* (Green & Grose's ed.), i. 333.

this proposition, though it be true with relation to that idea, which we had formed."[1] Here again Hume maintains that every idea is particular, so that even when the subject of a proposition is a common name, there is no 'general' idea. Nor is there any relation between ideas such as Berkeley supposed, but merely the transition from one particular idea to others, arising from a customary sequence of various particular ideas, which have no other connection with one another. All ideas being particular, propositions must be singular. Even when a proposition assumes a universal form, as when we say that "all triangles contain two right angles," the judgment is really a number of singular propositions in regard to particular triangles, associated by the influence of 'custom,' which, on occasion of a proposition in regard to a particular triangle before the mind, suggests an indefinite series of other singular propositions. A 'universal' proposition, in the sense of one which expresses the permanent nature of an object, is a fiction. We have now to see what results Hume reaches when he applies this doctrine in explanation of mathematical judgments. It will not be necessary to consider his view of number, as the principle of his philosophy will be sufficiently understood from his treatment of geometrical propositions.

Since all 'perceptions' are either 'impressions' or 'ideas,' and the latter are merely fainter 'copies' of the former, every object of consciousness must be originally given in an 'impression.' Now, it is at once obvious that there can be no 'impression' of pure space or 'vacuum': what we suppose to be the perception of pure space is

[1] *Ibid.* i. 328.

really 'darkness,' or the absence of coloured and visible objects. Nothing ever appears extended except what is either visible or tangible; and, if the perception is one of sight, what so appears is 'impressions of coloured points disposed in a certain manner.' Now, each of these points is a minimum, an absolutely indivisible impression; but any given extension is a 'compound' of these indivisible impressions. The perception of extension is thus in all cases that of 'coloured points disposed in a certain manner.' What Hume holds, then, is that a perception of sight consists in a certain collection of impressions or coloured points. A line or surface is therefore a certain number of such co-existent and indivisible impressions. What, then, do we mean when we say that "one line or surface is *equal* to, or *greater* or *less* than another"?[1] "Lines or surfaces," answers Hume, "are equal, when the numbers of points in each are equal; and as the proportion of the numbers varies, the proportion of the lines and surfaces is also varied." We cannot, however, make any use in practice of this 'standard of equality'; for, "as the points which enter into the composition of any line or surface . . . are so minute and so confounded with each other, it is utterly impossible for the mind to compute their number."[2] Hence "the only useful notion of equality, or inequality, is derived from the whole united appearance and the comparison of particular objects."[3] Judgments, however, which are based upon perception are never free from doubt, for "the addition or removal of one of these minute parts is not discernible," and we have no instruments which can enable

[1] *Ibid.* i. 350. [2] *Ibid.* i. 351. [3] *Ibid.* i. 352.

us to discern them.[1] Hence mathematical judgments are never more than approximately true. How can it be proved that "it is impossible to draw more than one right line betwixt any two points? . . . Supposing two lines to approach at the rate of an inch in twenty leagues, I perceive no absurdity in asserting, that upon their contact they become one. . . . The original standard of a right line is in reality nothing but a certain general appearance; and 'tis evident right lines may be made to concur with each other, and yet correspond to this standard, though corrected by all the means either practicable or imaginable."[2]

The mathematical doctrine of Hume may be stated in these three propositions: (1) Mathematical judgments rest upon impressions of sense; (2) they are singular; (3) they are only approximately true. Now these might equally well serve as a statement of the doctrine of Mill; so that the examination of the one is equally an examination of the other. The history of empiricism is at the same time a criticism of it; and it is also worthy of remark, that it runs through a series of phases which are parallel to the phases of the kindred doctrine as developed by the early thinkers of Greece.[3] A few remarks upon Hume's doctrine may, however, be made.

(1) Hume's conclusion that all judgments are singular is evidently the logical consequence of Locke's doctrine, that all real knowledge of nature is based upon immediate perception; for the moment we see that immediate perception must exclude every process of mediation, it becomes evident that we have no right to assert the

[1] *Ibid.* i. 353. [2] *Ibid.* i. 356-7. [3] See Note I.

reality of an object lying beyond perception, which cannot possibly be known to exist except by a process of inference. Berkeley and Hume were therefore right in maintaining that Locke's doctrine of perception is inconsistent with the reality of anything but perception itself. But, when reality is identified with the perception of the individual subject, all real propositions must express what is found in perception; and as a perception is a particular state of the subject, occurring at a particular time, if there are any real propositions at all, they must be singular. Hume was therefore justified in holding that, according to Locke's view of perception, which Berkeley accepted, there can be no *universal* propositions. The question therefore is, whether Hume is entitled to retain even *singular* propositions. Now, it is sufficiently obvious that even a singular proposition is possible only to a subject who not only has perceptions but makes them an object of thought. We must either say that perception already contains thought, or that it is merely a transient state or feeling of the individual subject. It is the latter view which Hume ostensibly holds, but it is the former view which is implied in his doctrine of the singular proposition. He tells us, *e.g.*, on the one hand, that the 'globe' which is the subject of a singular proposition contains "many different resemblances and relations," and, on the other hand, that it consists in "the impression of a white colour disposed in a certain form." How can an 'impression' contain 'different resemblances and relations'? A 'resemblance' or 'relation' cannot be known except by an act of comparison, in which various 'impressions' are found to be partly identical and partly different. If, therefore, we have the perception

of a 'globe,' we must have already gone through a process in which various perceptions have been brought before the mind and discerned to resemble one another; and hence perception cannot be immediate knowledge. Perhaps it may be said that perception is the direct consciousness of features which we *afterwards* discover to resemble the features of other objects. But this only throws us back upon a new difficulty. If this perception now before my mind has various features, these must be distinguished from one another, and this act of discrimination is in essence the same as that by which the various features of different perceptions are distinguished: it is an act of comparison and therefore of thought. Perception will therefore be, as Aristotle called it, a δύναμις κριτική.[1] We must therefore eliminate from perception the complexity of the elements supposed to be contained in it, and maintain that what we originally perceive are the separate features afterwards combined in the unity of one perception. But with this simplification the 'globe' has disappeared, and we are left with single characteristics. These we cannot call 'properties,' though Hume allows himself to do so, (1) because there is no unity to which the so-called 'property' is referred, and (2) because a 'property' is a permanent characteristic, and therefore involves the conception of the successive moments through which it persists. All that can be immediately present in perception must therefore be a single 'impression' as occurring at a certain moment. But this single impression cannot be the subject of a proposition. As Plato showed, it cannot be said to 'be,' for even as we try to name it, it has gone.[2] Hence we

[1] See above, p. 321. [2] See p. 314, Cf. p. 317.

cannot predicate anything of it, because to do so we must arrest it, and hold it before the mind; and it cannot be arrested, being in its nature a 'perishable passion.' There is, in other words, no purely immediate *object*; for of such an object we can say nothing. When, therefore, Hume maintains that there are singular propositions, he is thinking, not of mere impressions, but of individual objects or perceptions having complex characteristics, each of which is conceived as a permanent property. But an object which has a number of permanent properties combined in a unity is already a 'universal.' The so-called singular proposition is therefore already implicitly universal, and a universal proposition differs from it only in the explicit recognition of the combination of identical properties in various objects. No doubt the transition to the universal proposition involves the recognition, that what we call individual things are permanent only as they change; but, on the other hand, their changes are not possible except as involving permanence. We have, therefore, as Hegel points out, to advance to the conception of reality as constituted by the necessary relations of things to one another. It is none the less true that every singular judgment presupposes the comprehension of the individual as having a universal nature. This is especially manifest in the case of mathematical judgments, which in all cases express certain universal relations involved in the conception of the real world.

(2) The inadequacy of Hume's doctrine is further apparent in his attempt to reduce extension to impressions. There is, according to him, no pure space, because we can only have visual perception where there

is directly presented 'coloured points disposed in a certain manner.' Pure space is therefore for him a mere negation. Now, it is true that there is no pure space, if by this we mean a separate and independent reality. Pure space is the conception of all the possible external determinations of the real world, and except as a conception it has no existence. To say with Hume, however, that it is nothing at all is simply to say that there is no reality except impressions of sense. Certainly the conception of space is not contained in impressions of sense, for space cannot be presented, but can only be thought; and yet the world, unless it is thought as subject to spatial determinations, is not conceivable at all. Nor can we explain extension as 'coloured points disposed in a certain manner.' The 'points' of Hume are really surfaces, and a surface is relative to and implies a solid; hence, under the disguise of 'coloured points,' the conception of space as extension in three dimensions is tacitly assumed. Remove the 'points' of Hume, and nothing is left but colour; and colour is certainly not extension. But, even if it were extension, it would not be an 'impression,' but coloured extension; and coloured extension involves co-existence and continuity, whereas impressions are successive and discrete.

(3) Having reduced visual extension to impressions of coloured points, Hume has to explain what is meant by a line, surface, or solid in mathematics. Each of these, we are told, is a composition of 'coloured points': hence one line is equal to another when it contains the same number of these points; but they are so minute and confused with one another that we cannot count them. It is difficult to treat this doctrine seriously. A line

made up of a number of coloured points can only be a collection of coloured surfaces lying side by side, and therefore separated from one another. These cannot possibly form a line or rather a continuous surface. Moreover, each coloured point, or rather surface, must be divisible into parts, and these again must break up into smaller parts, and so on *ad infinitum*. Thus we never reach a line at all. The line of the mathematician, in short, is not made up of points, but is continuous, like the surface and the solid. A line is either the conception of any possible direction, or the conception of any possible limit of a surface, and the attempt to reduce it to particular impressions destroys its very nature. Hence it is not surprising that Hume should deny that geometry is an exact science. There can, on his view, be no straight line, because there can be no line at all. He at once assumes, however, that there are straight lines, and that they need not be straight. If this were true, the results of applied mathematics would be inexplicable. If a straight line need not be straight, how can the angles formed by the successive positions of the earth relatively to the sun be measured? Two lines that 'approach at the rate of an inch in twenty leagues' will finally touch and may seem parallel, but we could not know them to approach at that rate had we no conception of parallel lines, and no means of accurately determining the rate of deviation of any two given lines. Hume first assumes that the inexact judgments of ordinary observation are identical with individual impressions, and then that these judgments are ultimate. Neither of these assumptions is legitimate. The judgment that 'two lines seem parallel' is not an impres-

sion, and the judgment that 'parallel lines cannot meet' is quite distinct from the judgment that 'the sensible objects before us are so related to each other as to be parallel.' The latter judgment may well be false, but it can be proved false only if the proposition that parallel lines can never meet is universal and necessary.

V. THE ASSOCIATION OF IDEAS.[1]

THE doctrine of the 'association of ideas,' as held by Mill and others, is connected in the closest way with the doctrine that all the primary elements of experience are given in individual sensations. The so-called 'laws of association' are thus stated by Mill: "(1) Similar phenomena tend to be thought of together. (2) Phenomena which have either been experienced or conceived in close contiguity to one another, tend to be thought of together. The contiguity is of two kinds; simultaneity, and immediate succession. (3) Associations produced by contiguity become more certain and rapid by repetition. When two phenomena have been very often experienced in conjunction, and have not, in any single instance, occurred separately either in experience or in thought, there is produced between them what has been called Inseparable, or less correctly, Indissoluble Association: by which is not meant that the association must inevitably last to the end of life—that no subsequent experience or process of thought can possibly avail to dissolve it; but only that as

[1] Cf. pp. 7, 51, 77.

long as no such experience or process of thought has taken place, the association is irresistible; it is impossible for us to think the one thing disjoined from the other. (4) When an association has acquired this character of inseparability—when the bond between the two ideas has been thus firmly riveted, not only does the idea called up by association become, in our consciousness, inseparable from the idea which suggested it, but the facts or phenomena answering to those ideas, come at last to seem inseparable in existence."[1] Mill further reduces all 'inconceivabilities' to "inseparable association, combined with the original inconceivability of a direct contradiction." As to the latter, he tells us that its inconceivability arises from the fact that "we cannot attach sufficient meaning to the proposition, that identically the same statement should be both true and false, to be able to represent to ourselves the supposition of a different experience on this matter."[2]

(1) The first 'law' of association, as stated by Mill, is that 'similar phenomena tend to be thought of together.' When put in this form the doctrine seems to be based upon undeniable facts. 'Similar phenomena' are naturally regarded as objective facts, which are independent of the states of the individual subject who perceives them; and hence we take the 'law' to mean that there is a system of things having a fixed nature, and that experience consists in coming to a knowledge of it. When we consider Mill's doctrine more carefully, however, it becomes obvious that the 'law' is one applying only to the states of the individual subject. Manifestly there can be no 'associa-

[1] *Examination of Hamilton*, ch. xi., pp. 190-1.
[2] *Ibid.* ch. vi., p. 67.

tion' of 'phenomena,' if by 'phenomena' we mean things or events: 'similar phenomena' are in fact for Mill *similar feelings*. Even after this correction, there is still an ambiguity in Mill's statement of the 'law.' Supposing it to affirm that 'similar feelings,' *i.e.*, sensations or their copies, 'tend to be thought of together,' are we to understand this to mean that, when a man has 'similar feelings,' he makes these an object of 'thought,' or, in other words, compares them with each other and judges them to be 'similar'? This cannot be Mill's meaning, for the 'law' is an attempt to explain how one feeling calls up or suggests another feeling resembling it, not to account for the judgment that the one resembles the other. What Mill means, then, is that one feeling tends to suggest another feeling similar to it. Now, sensations are states of the individual subject, which exist only in the moment at which they occur, and are never repeated. "Why does a sensation received this instant remind me of sensations which I formerly had? I never had them along with this very sensation. I never had this sensation until now, and can never have it again."[1] When, therefore, one sensation suggests another like it, the two sensations are not present in the mind at the same time. But, if they are not both present at once, the one cannot be discerned to be similar to the other, and therefore, for the subject having them, there will be no *consciousness* of similarity. What, then, is the character of the feeling for the subject of it? If the sensation is, say, a sensation of 'white,' it will not be discriminated from other colours, for no other colour is present along with it; and if it is not discriminated, it

[1] James Mill's *Analysis of the Human Mind*, i. 112.

has no qualitative difference for the subject, and in fact is for him not an object. The truth, therefore, is that there is no purely individual sensation. What the subject has before his mind is a feeling discriminated as so and so, *i.e.*, a feeling with a content which is grasped by thought. The associationist reduction of consciousness to a disconnected series of feelings is untenable, and equally untenable is its doctrine that one feeling calls up or suggests another similar to it. What, then, gives plausibility to the so-called 'law of similarity'? The associationist pyschologist begins with the assumption of an individual subject limited to his own states, and therefore virtually conceived as an independent being isolated from all others. One reason for this assumption is a recognition of the truth, that for each individual nothing exists except what arises for him in the process by which his knowledge grows. He has no knowledge when his life begins, and his knowledge, as it is supposed, must therefore be something which comes to him from without. It is forgotten that the distinction of 'within' and 'without' is one which itself arises in the process of knowledge, and is impossible for a being that does not distinguish between himself and the object which he knows. The beginning of knowledge therefore involves this distinction, though it is not reflected upon. In it there is something vaguely discriminated from the subject, and vaguely apprehended as qualitatively different from something else. No conceivable *object* can be less than this.[1] But if not, the beginning of knowledge is not a simple feeling—which in fact exists nowhere but in the false theory of

[1] This does not mean that there is no feeling prior to perception, but only that it is not the consciousness of an object. See Note xi.

the associationist psychologist—but the perception of the qualitative difference of one object from another and from the subject. Thus the associationist psychologist falls into a double mistake. In the first place, he substitutes his fiction of a purely individual feeling for the actual object; and, in the second place, he bases what he calls 'laws' upon the first inadequate conception of the world as it appears in the nascent consciousness of the individual subject. The first mistake has already been referred to; the second follows from it. For, if the subject receives knowledge entirely from 'without,' and receives it in the form of individual sensations, all the more complex products of knowledge must be in some way derived from individual sensations. It is not seen that, in a developing subject, it is the last and not the first stage which determines the true nature of things. Overlooking this truth, associational psychology lays down so-called 'laws' of mind, which are not even an accurate statement of the first and simplest phase of knowledge, and which are altogether inadequate as a statement of its final phase. One of these 'laws' is that of 'similarity.' Of course it is based upon a real fact, for we certainly do recognize the similarity of objects; but this undeniable fact is distorted almost beyond recognition. The truth which underlies the 'law' is that, in a world which constitutes a system, there must be in all its parts at once difference and identity. If difference were entirely absent, there would be merely a blank, undifferentiated unity, which is at bottom nothing at all; if identity were entirely absent, there would be no 'cosmos,' and therefore no knowledge. Such being the nature of the world, it is not surprising that the subject should so apprehend it. His own sensitive organism is

a part of the whole, and, like everything else, it is a unity-in-difference. Responding to the environment, it undergoes changes of feeling, and these are the direct object of the conscious subject when he begins to make the changes in his organism an object. Hence knowledge begins with the consciousness of sensitive differences. These differences, however, are not *mere* differences, but identities-in-difference, and this is 'likeness' or 'similarity.' If, however, we formulate the laws of mind on the assumption that it has here reached its true form, we shall fall into the mistake of taking the simplest phase of mind as ultimate. The associational psychology not only does so, but identifies the first phase of consciousness with the sensibility out of which it has just emerged; treating consciousness, which cannot exist at all except as a unity-in-difference, as if it were mere difference. The element of truth in the law of similarity is therefore this: that the mind in its first and simplest phase begins with the consciousness of qualitative differences. As it develops, these become more and more precisely discriminated, and at the same time *pari passu* the unity of the world is more and more clearly grasped; but from first to last the subject is within the real world, not shut up within a separate mind. The process of development will become clearer by considering the second law of Mill, that of 'contiguity.'

(2) The law of contiguity is thus expressed: "Phenomena which have either been experienced or conceived in close contiguity to one another tend to be thought of together," the 'contiguity' being either 'simultaneity' or 'immediate succession.' Here, again, we must understand the term 'phenomena,' not as objective facts, but

as individual feelings. When these are said to have been either 'experienced' or 'conceived,' what is meant properly is, that they have *occurred* either as sensations or as copies of sensations. 'Close contiguity,' it will be observed, is expressly limited to 'simultaneity' or 'immediate succession'; and quite correctly from Mill's point of view, for feelings, whether they are sensations or images, are not extended, and therefore can only be affirmed as *temporal*, not as *spatial*. The 'law' thus means: "Feelings, whether these are sensations or images, when they have occurred simultaneously or in immediate succession, tend to be reproduced together." The law might be further simplified; for, strictly speaking, no two feelings are simultaneous, what is called 'simultaneity' being really rapid succession. It would then read: "Feelings, whether these are sensations or images, when they have occurred in immediate succession, tend to be reproduced in immediate succession." Now, this 'law' will obviously not explain *co-existence*, but must explain it away; for co-existence is conceivable only as excluding succession. As employed by Mill, however, no clear distinction is drawn between 'contiguity' in place, simultaneity of events, and succession of feelings, with the result that all three are treated as if they were identical. What gives plausibility to the 'law' is this confusion. We might in fact say that we have here three distinct laws: (1) Objects which have been perceived as co-existent are afterwards represented as co-existent; (2) Events which have been observed to be simultaneous or successive are afterwards represented as simultaneous and successive; (3) Feelings which have occurred in immediate succession afterwards tend to recur in immediate succession. The first two of these laws

refer to the object, the last refers to the individual subject. Now, it is true that, at a certain stage in the development of knowledge, the world is viewed as consisting of co-existent objects and of events simultaneous or successive. This, in fact, is the stage which is usually distinguished as perception, the stage in which we view the world as extended spatially, and as exhibiting changes in time. As we begin by distinguishing resemblances, so we advance to the more specific determination of the external world as consisting of objects separated spatially, and of events occurring together or in succession. At this stage our attention is directed to the object, not to the subject, and hence it seems to us that things and events are simply observed by us without any activity of intelligence. This is the point of view from which the associationist psychologist starts. Turning his attention to the knowing subject, he naturally attempts to explain the process of knowledge as a series of feelings, because he has assumed that the objective world is already constituted for the subject. He therefore overlooks the fact that a world, which is determined as consisting of co-existent things and of simultaneous and successive events, has grown up only by the interpretation of feelings as involving relations in the way of co-existence, simultaneity, and succession. Hence he characterizes the conscious life of the subject as a succession of feelings occurring in a regular way. But, if conscious life were nothing more than this, there would be for the subject no world of objects, nor would he be conscious of his own experience of such a world. The so-called 'law of contiguity' is, therefore, nothing but a distorted expression of the truth that conscious life is a process. The associationist, instead of seeing that it is a

process, regards it as a mere series of separate feelings, arbitrarily and externally connected. Nothing could be more untrue to the facts. The inner life of the subject is the outer life regarded from the point of view of its relation to a knowing subject. It contains the whole wealth of the outer life, together with the consciousness of self as knowing. What the 'law of contiguity' is trying to express is that, at the stage of perception or observation, the world is conceived by the subject as if it were a congeries of individual things and events, while the subject has not yet recognized that it is relative to his intelligence. If the associationist psychologist merely said that, for the subject who is still at this stage, his own inner life is viewed mainly as a series of individual perceptions, he would be partly though not wholly correct; for the subject, not having made his own inner life an explicit object of reflection, naturally views it as a series, though he has also an implicit consciousness of his own self-identity.

There is still another defect in the 'law of contiguity.' Not only does it confuse successive feelings with co-existent objects and simultaneous or successive events, but it identifies co-existence and succession with reciprocal action and causality. Mill, like his master Hume, explains away these two forms of causation, attempting to reduce them to co-existence and succession. This is a fatal defect in a psychologist, because it confuses two different grades of consciousness, attempting to reduce the higher to the lower. As Hegel points out, the observing consciousness is implicitly the understanding consciousness, and develops into it.[1] This in fact is the transition from the ordinary consciousness of a world of

[1] *Phänomenologie des Geistes*, pp. 97 ff.

objects and events, to a world characterized by fixed laws as it exists for the scientific man. This third stage of consciousness therefore falls under a higher law than the second. Hence the law of contiguity would now have to be expressed somewhat thus: "Phenomena which have been experienced as reciprocally active and as exhibiting a connected series of changes are ever afterwards conceived as under the laws of reciprocity and causality." This shows how hopelessly the 'law of contiguity' distorts the facts. It is absurd to characterize the mental life of the scientific man as consisting in a series of feelings; his whole life *as* a man of science consists in the comprehension of the fixed relations or laws of the real world. Moreover, at this stage, not only are definite phenomena conceived as under laws, but these laws are themselves made an explicit object of reflection, and consciously applied in explanation of the real. It is only when the false assumption is discarded that mental life consists in individual states, which can be treated apart from the actual process of knowledge, that psychology yields really fruitful results. The first step in its reconstruction is to determine the living being from the point of view of immanent teleology, and to treat the mental life as the process of development from lower to higher stages.

(3) The radical defect in the 'laws of association' is further apparent in Mill's doctrine of 'inseparable association.' Assuming that the mental life consists in a succession of individual feelings, he is led to the conclusion that there are no fixed relations or laws at all. A 'square' being one feeling, and 'round' another, there is, according to him, no reason why there should not be a 'round square.' But neither a 'square' nor 'round' is a feel-

ing; these are fixed relations involved in the very nature of the spatial world, and grasped as such at the third or understanding stage of consciousness. 'Inseparable association' therefore rests upon the untenable assumption that individual feelings yield any knowledge. The element of truth which it involves is that science consists in the comprehension of the fixed relations of the world. Were there no such relations, there would be no possibility of the simplest experience, not even of the experience that one event follows another. The associationist psychologist attempts to interpret the conscious life from the point of view of the crudest and simplest theory, and it is not surprising that he should end in a doctrine which dissolves the real world into unintelligible fragments.

(4) Besides the 'inconceivabilities' which arise from 'inseparable association,' Mill holds that a direct contradiction is inconceivable, because we cannot attach any definite meaning to the proposition that "identically the same statement should be both true and false." The law of contradiction is therefore, as Mill conceives it, simply that, if it is true that A is B, it cannot be true that A is not B; in other words, it is merely a formal principle. Such a 'law' evidently carries us a very little way: it does not assure us that we have any true knowledge, but merely tells us that, if we have true knowledge, we cannot at the same time be in error. A negative criterion of this sort is obviously of very little value if it is combined with a doctrine which makes true propositions unmeaning. Now, according to Mill's view of 'inseparable association,' no proposition whatever can be framed which has more than a relative or subjective value. Even mathematical propositions are of this character. The perception

of a square has never gone along with the perception of a circle, but there is nothing to show that we might not have the experience of a round square. There is, in short, no reason why any sensation should not be accompanied by any other sensation, and therefore no reason why sensations might not be so combined that no proposition we now make should be true. The only legitimate conclusion from such a doctrine is, that any predicate may be combined with any subject. Suppose, therefore, we symbolize a given subject and predicate by *A* and *B* respectively, is it not obvious that it is also possible on Mill's view that *A* is *not B*? The law of contradiction can therefore only mean, for Mill, that the proposition '*A* is *B*' may seem to a certain subject true, and may yet to another person, or to the same person at another time, seem false. As there are no universal judgments, true for every intelligent subject, we cannot speak of truth but only of what appears true. But with the denial of true propositions we must also deny false propositions, and therefore Mill is not entitled to say that the same statement cannot be both true and false. There is thus for him no law of contradiction. The source of the inadequacy of Mill's doctrine is due to the πρῶτον ψεῦδος of his philosophy—the assumption that knowledge is reducible to individual feelings. Unless there are universal and necessary judgments there is no coherent system of ideas, and therefore no real world; and the denial of the principle of contradiction, which is the logical consequence of his doctrine, is merely one form in which his theory of knowledge betrays its inherent weakness. It may be said, however, that the law of contradiction is not a law of thought. How far this objection is valid will be considered in the following Note.

VI. THE PRINCIPLE OF IDENTITY OR NON-CONTRADICTION.[1]

A. ARISTOTLE'S DOCTRINE OF IDENTITY.

WHAT is now called the law of identity or non-contradiction is expressed by Aristotle in the formula, that "the same thing cannot at once belong and not belong to the same object in the same respect (*τὸ γὰρ αὐτὸ ἅμα ὑπάρχειν τε καὶ μὴ ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό*)." The manner in which this principle is expressed is sufficient to indicate that it was not conceived by Aristotle as a purely formal law of thought, but as at once a law of thought and a law of reality. It is meant to indicate the fundamental condition of all intelligible reality, or, what is at bottom the same thing, the fundamental condition without which there can be no intelligence whatever. This principle, as Aristotle contends, cannot be established by a process of proof, just because it is the principle upon which all proof is based; but it can be shown that any one who denies it really pre-supposes its truth, if his denial has any intelligible meaning at all. Any one who says that 'the same thing may at once be and not be' must give one definite meaning to the words 'be' and 'not be,' or his words are mere inarticulate sounds. So also the subject of the proposition must have some one meaning, whatever it is. Intelligible speech therefore implies that the real has a definite nature, which can be grasped by thought and expressed in a proposition; in fact, unless there is something which is essential and inseparable from the very existence of

[1] See pp. 92-3. Cf. pp. 10-11.

a thing, there can be no real knowledge. To say that all the predicates by which a subject is characterized are temporary or accidental is simply to say that there is no substantial reality whatever. The truth, however, is that we can only affirm certain characteristics to be accidental relatively to the essential characteristics which are grasped by thought. Upon this comprehension of the permanent nature of things all real distinctions rest. If whatever is affirmed of a thing may with equal reason be denied, there can be no distinction between 'man,' 'ship,' 'God,' or anything else, and thus all definite reality disappears.[1]

What Aristotle contends, then, is that there is an inseparable connection between the unity of things and the unity of intelligence with itself. The principle of contradiction, as thus understood, is the basis of all science; for there can be no science unless we can attain to the universal (τὸ καθόλου), and indeed the essential distinction between 'science' (ἐπιστήμη) and 'opinion' (δόξα) just consists in this, that the former is the comprehension by intelligence (νοῦς) of that which 'cannot be otherwise' (τὸ μὴ ἐνδεχομενον ἀλλως ἔχειν), whereas 'opinion' never advances beyond probability. Now, the 'universal' is that which can be predicated κατὰ παντὸς, *i.e.*, of a whole class of things, just because it can be predicated καθ' αὑτὸ, *i.e.*, as essential to the reality of each member of the class. Hence there can be no proof unless intelligence is capable of grasping the essential characteristics inseparable from the existence of each thing. It is therefore in accordance with the spirit of the Aristotelian philosophy

[1] Met. Γ, 4, 1008ª2—ᵇ11.

to translate the principle of contradiction into the form: "The same essential characteristics cannot belong and not belong to the same object."[1]

To get a full conception of the principle of contradiction, as conceived by Aristotle, we must also remember what has been pointed out above,[2] in connection with his criticism of phenomenalism, viz., that the essential nature of a thing is its 'form' (εἶδος), 'essence' (τὸ ἦν εἶναι), or 'end' (τέλος). The principle of contradiction does not mean that what a thing is at one moment it must always be, but that in all its changes it preserves its identity and remains within certain insuperable limits. Each thing is by its nature (φύσις) determinate, but this determinate nature is the formative principle (εἶδος) working in it and prescribing what changes it shall pass through. In a sense, therefore, Aristotle does not deny that there is contradiction in things: there is contradiction, if we take any single phase in the process of change through which a thing passes, and regard it as ultimate; for, no sooner have we done so, than the thing, by changing and developing opposite characteristics, shows that we had not grasped its essential nature. Aristotle, however, would say that the contradiction is not in the thing, but in our inadequate conception of it; and that, when we really comprehend the essence of a thing, we cannot predicate of it what is contradictory of that essence. The contradiction thus rests upon the fixed nature of real things as grasped by thought; and if there is no such fixed nature there is no intelligible world, but merely a chaos of indeterminable accidents.

[1] Anal. Post. i. 33, 88ᵇ30-38; ii. 19, 100ᵃ15. [2] See p. 319.

B. HEGEL'S DOCTRINE OF CONTRADICTION.

It is popularly supposed that Hegel denies the principle of contradiction in the sense in which Aristotle affirms it; in other words, that he affirms that "the same thing may at once be and not be." What Hegel really denies is the doctrine of formal logic, that thought consists in the mere analysis of abstract ideas, a doctrine which is formulated as A = A. A conception, as he maintains, is the product of the constructive activity of thought, which does not passively receive its content from without, but reacts upon and interprets it in accordance with its own nature as intelligence. There is nothing in this view which is inconsistent with what Aristotle maintains; for he too points out that, while the intelligence starts from the data of sensible perception, goes on to grasp the principle or law implicit therein, so as to reach the stage of experience, and finally attains the stage of science in which it contemplates the 'forms' of things; it yet is only in this last stage, where intelligence directly knows itself, that true reality is reached. Moreover, Aristotle points out, as we have seen,[1] that the principle of contradiction is not incompatible with the process of change, or with the denial that reality can be characterized as it presents itself to sensible perception. The difference between Hegel and Aristotle is much deeper. Both believe in the intelligibility of the universe, but Aristotle never surmounts a preconception which is fatal to the rationality of the real, in which yet he firmly believes. That preconception is, that there is in the actual world an element of matter (ὕλη) or contingency which prevents it from

[1] See p. 377.

being a perfectly ordered system. On his view the finite as such must be so far irrational that it is never completely realized. Hence when he comes to define the ultimate principle of reality, Aristotle conceives of it as a Being separate from the world and self-complete in its isolation; not seeing that, on this view, he must either make the world an illusion, or conceive of the ultimate principle as finite, because limited by a reality apart from it. Now, Hegel refuses to admit that the world is in any sense irrational, and therefore he has upon his hands a problem which Aristotle never put to himself, viz., how it can be said that 'all things are good,' while yet the finite is burdened with imperfection and evil. It is obvious that any one who attempts seriously to solve this problem must be able to reconcile what appear to be the sharpest contradictions. Hegel seemed to find the solution in the principle of development, which Aristotle had applied in his own way in explanation of the process of the world; but in his hands it assumes the form of the doctrine, that the intelligence contains contradiction within itself so long as it has not come to perfect unity with itself, and that the consciousness of this contradiction is a source of unrest until it has been overcome. Aristotle is not entirely unconscious of this 'dialectical' character of reason, for he too maintains that science consists in the resolution of the contradictory views which 'dialectic' states, but leaves unsolved. For him, however, 'dialectic' is due to the superficial points of view of the unenlightened thinker rather than to the nature of reason itself. Hegel, coming after Kant, could not fail to see that reason is in itself dialectical, and inevitably gives rise to what Kant calls 'antinomies,' *i.e.*, contradictory conceptions which may

be equally justified, so long as the common point of view from which both proceed is accepted as ultimate. Thus, as Kant argued, we can establish the universality of the law of mechanical necessity and the existence of beings beyond its sway with equal cogency, so long as we assume that knowledge of reality is identical with 'experience'; and Kant's solution of the antinomy was to maintain that the ultimate reality falls beyond knowledge, though not beyond a rational 'faith.' Now, Hegel refused to accept this solution, maintaining that it separated the real from the knowable, and therefore made the knowable unreal. The problem which he had to face was, therefore, to convert the indeterminate 'noumenal' of Kant into an ordered world in which intelligence should find itself at home. But to do so, he had to undertake a more searching investigation into the conceptions by which the human intelligence has attempted, with more or less consciousness, to reach a consistent view of the world. The intelligence he therefore conceived as containing within itself, implicitly, the ultimate principle of reconciliation; and the task of philosophy must therefore be to follow it through the whole of the process in which it has toiled at the construction of a completely rational conception of the universe. Now, obviously all stages in this process, except the last, must contain contradictory conceptions; for otherwise the intelligence must have reached its goal, and could advance no further. Hence philosophy must first express these contradictory conceptions in definite terms, free from the obscurity of popular language and the confusion in which the ordinary mind is accustomed to dwell. When this has been done, the way will be prepared for a higher conception, which

shall unite the contradictory conceptions, *i.e.*, the conceptions which are contradictory, provided the assumption upon which both rest is accepted. It is thus evident that the principle of contradiction cannot be accepted by Hegel, if it is understood to mean that knowledge consists in a number of detached propositions, all of which are upon the same level, and therefore all equally true. So understood, the principle of contradiction is itself an instance of one aspect of a truth being taken as if it were the whole truth. For the 'law of identity' will then mean that thought consists in the exclusion of differences, or in a mere tautology. The principle of thought, if we are to express it generally, is neither identity nor difference, but identity-in-difference. This, in fact, is merely to say that intelligence is a process in which separate conceptions, which are contradictory of each other, are both held at once. Nor is this merely accidental; for there is no way in which intelligence can reach an all-reconciling conception except through the long and toilsome 'labour of the negative,' *i.e.*, by first setting up what seem to be adequate conceptions, next awakening to the consciousness of their inadequacy, and then advancing to a more adequate conception. Hegel does not deny that the principle of contradiction is the ultimate principle of all knowledge, but he denies that it is a principle of mere identity; and therefore he refuses to admit that a science of reality can be constructed, after the method of mathematics, by laying down particular propositions and referring to these at every step in the demonstration; for every particular proposition which embodies a conception of reality, reached at a certain stage in the development of intelligence, must be denied when we advance to a

higher stage, though at the same time the element of truth implicit in it is absorbed in the higher conception.

"The Law of Identity," says Hegel, "in its positive form, A = A, taken literally, is merely the expression of an empty tautology. It is therefore rightly said to be a law of thought, which is devoid of all content, and adds nothing to knowledge. Those who are always appealing to this empty identity as a true and ultimate principle, tell us that 'identity' is exclusive of 'difference,' or that 'identity' and 'difference' are 'different,'—not seeing that, in affirming 'identity' to be 'different' from 'difference,' they are virtually saying that 'identity' involves 'difference'; and as they present this as the very nature of 'identity,' they unwittingly admit that 'difference' is not something external to 'identity,' but belongs to its very nature."[1]

The 'law of identity' which Hegel here rejects is the 'law' as maintained by the formal logician, who assumes that thought has nothing to do with the constitution of the known world, but can only analyze and express what is already contained in the abstract idea which forms the subject of a proposition. This doctrine is that which Locke rejected when he declared all merely analytical propositions to be 'trifling' or 'uninstructive.'[2] The development of this doctrine has shown its inherent absurdity. If A = A, every proposition must be tautological, and every inference from tautological propositions must also be tautological. The whole process of real judgment and inference must therefore fall beyond thought, and we must suppose that reality is revealed only in sense. Hegel is therefore justified in rejecting the 'law of identity,' as

[1] *Wissenschaft der Logik*, ii. 32. [2] See above, p. 340.

maintained in formal logic. In doing so he does not touch the Aristotelian law; for, as we have seen, Aristotle does not conceive identity as a purely formal law, but as an expression of the necessary unity of thought with itself in the comprehension of the real; nor does he conceive of the real as dead unchanging identity, but as identity in change.

When Hegel adds that even the formal logician virtually denies his own 'law' when he says that 'identity' is 'different' from 'difference,' he may at first sight seem to be merely playing upon words; but in reality he is showing that a purely formal law of identity can neither be thought nor expressed. For, if thought proceeds on the principle of abstract identity, the law of identity should be expressed in the form, 'identity is identity'; which is either unmeaning, or implies that 'identity' is not 'difference,' so that the combination of 'identity' and 'difference' in one conception is the condition of the judgment being made. Two ideas thus brought together in one conception cannot be absolutely exclusive of each other, but must be correlative; hence the attempt to think either without the other is an attempt to think the unthinkable. Hegel therefore goes on to say that the formal logician, "in fixing upon dead, immovable 'identity,' the opposite of which is 'difference,' does not see that he is making 'identity' one term of a relation, and therefore denying that it is true when taken in abstraction from the other term. Yet, it is admitted that the law of identity expresses only one aspect of reality, when it is said that its truth is only formal, abstract or incomplete. For in this admission it is plainly implied that the true nature of reality consists in the unity of 'identity' and 'difference.' When it is

maintained that abstract identity is incomplete, there is vaguely thought a totality that is complete, by reference to which identity is pronounced incomplete. On the other hand, 'identity' is absolutely separated from 'difference,' and in this separation is assumed to be essential, valid, and true. These contradictory assertions simply show that the two opposite views are not brought together: (1) that 'identity' in abstraction from 'difference' is true, and (2) that in this abstraction it is incomplete."[1] The admission, Hegel argues, that 'identity' is *merely* a law of thought implies that the comprehension of reality involves the complementary aspect of 'difference.' The 'difference,' in other words, falls into the *content*, and this content is conceived of vaguely as containing 'difference' as well as 'identity.' But the content is the real, and therefore it is tacitly admitted that reality is identity-in-difference; a view which is the direct opposite of the doctrine that abstract identity is a fundamental law of thought. Otherwise expressed: if reality is concrete and thought abstract, reality is not grasped by thought, and therefore the law of identity cannot be a law of thought, except under presupposition that truth and reality fall apart. We must therefore conclude that all real thinking consists in grasping identity-in-difference. If this is admitted, we shall no longer hold the mutually contradictory doctrines, (1) that thought enables us to arrive at truth, (2) that reality lies beyond thought, and therefore beyond truth. Reality and truth must coincide, and therefore both must involve identity-in-difference.

Now, if it is once admitted that thought can only grasp reality truly in so far as it reconciles all the differ-

[1] *Ibid.* 33.

ences of the real with the identity of the whole, it seems impossible to escape from the conclusion that even the most stubborn differences—such as those of mind and matter, subject and object, God and the world—must be ultimately comprehended as a concrete identity or totality. The identity, however, must be one in which all the differences persist, though not *as* differences. This principle will be violated, if mind is separated from matter, subject from object, God from the world. Hence Hegel has to show that matter is an element or phase of mind, the object of the subject, the world of God. His *aim*, at least, whatever his success may have been, is to get rid of the abstract separations which rule the ordinary consciousness and even the scientific consciousness, and to embrace all the phases of the real in a single rational system. Hence, as has already been said, he insists upon the inadequacy of all such partial views as those which affirm the independent reality of matter or of mind, object or subject, the world or God, seeking to substitute a conception of existence in which they are combined in a single organic unity.

VII. CAUSALITY AND THE SYSTEM OF EXPERIENCE.

THE discussion of Causation and what Mill calls the 'uniformity of nature,' contained in Chapter V., will, no doubt, be felt to be inadequate by any one who is familiar with the complexity of the problem; and, indeed, it does not attempt to do more than show that, admitting

the assumption upon which physical science rests, viz., that every change has definite conditions, we are forced to hold that causation involves certain fixed relations in the objects revealed to us in experience. It may, however, be not unfairly objected that a philosophical theory is not entitled to *assume* the validity of such a principle, but by the very law of its being must either place it upon an assured foundation, or refuse to admit its validity. On the other hand, it is impossible to separate the question of causality from the general problem of the conditions of knowledge, and difficult to deal with the larger question without writing a whole system of philosophy. I can only hope in what follows to do something to remove the perplexity in which the problem is involved.

It is a step in the right direction when the term 'causality' is understood to mean the orderly connection of elements of experience. This implies that the relation in question is not one which falls beyond possible knowledge, but one which is involved in knowledge. But, reasonable as this limitation seems to be, it has often been ignored or even denied; and such questions have been raised as, What is the 'cause' of sensation? meaning by this, What is the object lying beyond knowledge which produces sensations in us? Now, obviously a 'cause,' as so conceived, is not what the scientific man, or even the man of plain common-sense, usually understands by the term, though both may at times fall into this way of thinking. The former, at least, regards a 'cause' as a 'phenomenon,' *i.e.*, as a possible object of knowledge; and, therefore, so far as he is consistent with himself, he will not admit the existence of any 'thing in itself,' as distinct from the thing which he knows, when he is

seeking for the 'cause' of a sensation. But, though he may escape this pitfall, he is apt to fall into another. He is so accustomed to assume that the only problem which can be raised is in regard to the orderly connection of elements of experience, that it does not occur to him that the question, What is the cause of sensation? involves an assumption as to the nature of sensation which cannot be justified. That assumption is, that sensation and the external conditions of sensation are upon the same level, and, therefore, that to state the external conditions of sensation is to assign its 'cause.' But sensation is the response of a living being under certain external conditions, and to speak of those conditions as if they were a complete explanation of sensation is to ignore what is distinctive of the living being. The principle of causality thus shows itself to be limited in its application: it fixes upon the orderly connection of elements of experience, but it ignores the distinctive characteristics of different orders of being. Now, unless we are to reduce the real world to the Procrustean bed of mechanism, we must recognize that causation, in the sense employed, is not a final determination of reality. But, with a recognition of this truth, the principle of causality sinks into the position of a true but inadequate conception of the world. All that, in strictness, is meant by it is, that the world, whatever else it may be, involves an orderly connection of elements; in other words, the principle of causality cannot any longer be regarded as the ultimate principle of experience.

That the principle of causality is not self-supporting, but points beyond itself to a higher principle, may perhaps be most readily seen in this way. Before there can be any orderly connection of the elements of experience, these

elements must all be contained within experience; in other words, they must all be known. Now, it is obviously not an explanation of known elements to say that they *are* connected; it must also be shown that they are *known* as connected. We are therefore entitled to demand from anyone who asserts the connection of elements of experience, that he should explain how they can be connected. What we desire him to tell us is, what account he has to give of knowledge. If he admits that there is knowledge, he must not at the same time give such an explanation of it as makes the knowledge of connected elements of experience impossible. Such an explanation, as we maintain, is that which declares knowledge to consist of particular feelings. No number of particular feelings can account for connected elements of experience, because, *ex hypothesi*, those feelings are not connected, but are separate or individual states. If it is answered that in point of fact our inner life begins with such 'states,' and, even in our more developed experience, is largely made up of them; we deny the asserted fact, and we further affirm that, even if it were true, it would be irrelevant. We deny the asserted fact, maintaining that purely individual feelings have no existence for any living being, not even the lowest; that, on the contrary, every sensitive being has a continuity of feeling in which the so-called 'states' are merely elementary distinctions, emerging in the continuous life of feeling, not separate feelings. We deny its relevancy, because, granting the *sensitive* life to be discontinuous, it does not follow that the *conscious* life can be so characterized, and there is no experience of connected elements prior to the conscious life. This is so obvious that it would never have been doubted had not Hume adopted from Locke the

doctrine that real knowledge consists of particular sensations, and had not the Associationists with equal docility accepted the view of Hume. But we go further. Not only is it impossible to explain the connection of elements of experience on the basis of discrete feelings, but it is impossible to explain it on the basis of any psychological theory whatever, so long as psychology is conceived to deal with the individual subject. For, so long as the subject is regarded as an object—and he must be so regarded if he is viewed as one being beside others—we do not explain how the subject can be a subject, *i.e.*, can have a knowledge of himself as an object. It matters not whether the conscious life is conceived as interrupted or continuous: so long as no attempt is made to explain how there can be conscious life at all, no form of experience is explained. For, the experience of connected elements is impossible unless for a being who lives in the whole, and no being can live in the whole, who cannot attain to a universal point of view; in other words, only a thinking subject can have the experience of connected elements. Connected elements involve (1) elements, (2) their connection. How can there be elements which are not elements in a whole? And how can there be a connection of elements unless these are discriminated? But to discriminate elements and connect them within a whole is precisely the work of thought. Now this process, with its threefold aspect, is impossible unless there is a subject which by its very nature is a unity capable of discriminating and connecting all the elements of its experience. And such a subject is not itself merely an orderly connection of elements; it is the primary condition of all orderly connection of elements. Hence there can be no experience whatever

apart from the self-activity of a thinking subject—a subject which is capable of bringing all the elements of its experience, including the process of its own individual life, within the one system of experience. There is, therefore, no experience except for an intelligent subject, and hence the determination of the known world by merely causal relations can only be a subordinate aspect in the determination of it as an intelligible system presupposing intelligence.

VIII. NATURAL EVOLUTION.[1]

In the text I have assumed, for the sake of simplicity, that the Darwinian theory is identical with the doctrine of natural selection. This of course is not precisely true, except of such biologists as Wallace and Weismann, who refuse to admit any other factors. Darwin himself had recourse to sexual selection and in a less degree to the Lamarckian factor of use and disuse, and Romanes insists upon the new factor of segregation of varieties within the limits of interfertility. Natural evolution, in its widest sense, also includes the pre-biological development of physical into chemical phenomena, and of the latter into the phenomena of life. With these, however, Darwin refused to deal. Confining ourselves to the biological stage of evolution, and accepting the view of such writers as Professor Le Conte, in its scientific as distinguished from its philosophical aspect, the argument in favour of immanent teleology proceeds much more smoothly; though even natural selection alone, as I have maintained, is

[1] Cf. ch. vi., pp. 107 ff.

unintelligible if it is supposed to be inconsistent with the idea of final cause or purpose. No scientific doctrine of evolution, however, can explain knowledge and morality, whatever the number of factors employed may be, without ceasing to be merely scientific and becoming philosophical.[1]

IX. DESCARTES AND KANT.

A. THE CARTESIAN COGITO ERGO SUM.

THE short statement and criticism of the Cartesian conception of mind, contained in the text,[2] will be better understood from an account of the manner in which it is reached, and by a consideration of the searching criticism to which it is subjected by Kant, who maintains that it rests upon a confusion between the self as object and the self as subject.

The method of Descartes is to begin with the confused mass of ideas which he finds in his own consciousness, and, by subjecting them to a searching analysis, to reach if possible a connected system of principles, expressive of the real nature of things. That he is actually in possession of ideas he takes for granted, and his question is how far they can be regarded as containing a knowledge of real existence. Roughly speaking, all those ideas concern the existence and nature of the self, the world and God, and his problem is to determine whether there are real objects

[1] Those who are interested in this topic may be referred to my *Christianity and Idealism*, 2nd ed., ch. ix. Cf. 1st and 2nd eds., ch. vii., pp. 181-191.

[2] See ch. vii., pp. 138-142.

corresponding to them, and what is the nature of those objects.

Now, some very simple considerations are sufficient to show that our ordinary belief in the existence and nature of an external world is by no means beyond the reach of doubt. In our ideas of sense we seem to be brought into direct contact with objects as they actually exist, and hence the uncritical mind assumes that there are real external things, and that they are as they appear. This naïve belief is at once upset when it is discovered that the senses often deceive us; for, if we are to reach the sure basis of scientific knowledge, we cannot accept the testimony of a witness which is not consistent with itself. We must, therefore, in the first instance at least, reject entirely the belief in the existence of objects having the properties which our senses seem to say they have. Not that, like the ancient sceptics, we can be contented to rest in this attitude of doubt; for what we are in search of is indubitable knowledge, and doubt of what is doubtful is merely a means to the discovery of what cannot be doubted. We admit, then, that we have ideas of sense, but we attribute to them no other reality than to dreams: they are actual states of consciousness, but whether there are any real objects corresponding to them we do not yet know. It may indeed be objected that in refusing to admit the reality of external objects, we are carrying our scepticism beyond all reasonable limits. Granting that external things are not in themselves what they appear to our senses to be, why, it may be asked, should we deny all reality to them? A real corporeal existence, having the properties of figure, magnitude, and number, is not a self-contradictory conception, and therefore it is not open

to the objection which has been brought against our ideas of sense. Why, then, should we affect to doubt the reality of such an object? To this objection Descartes answers that, even as thus purified, our ideas of external reality, self-consistent though they be, may only possess the self-consistency of a well-ordered dream. For if there is a God, He may purposely produce in us the illusion of extended reality; and if there is no God, the apparent reality of external things may be due to a defect in ourselves. Now, we must not run the risk of admitting anything to be real which is in the least degree doubtful, and therefore we must at present suppose that there is no external reality, and that our ideas of such a reality are mere fictions. Our position, then, is, that so far as we yet know there may be no external reality whatever. But while we are thus in absolute doubt as to the existence of external reality, there is no doubt that we are in a state of doubt. Now, doubt has its own reality, the reality which belongs to every idea which is in our consciousness. It is possible to doubt that what we think actually exists as we think it, but it is not possible to doubt that we do think or have ideas. Thus to doubt is to think or be conscious, and therefore the fact that I doubt implies that I who doubt or think exist. At last I have found a reality, the reality of myself, which is absolutely indubitable. *Cogito ergo sum.* There may be no external reality, but the reality of myself is proved by my thinking.[1]

There has been a good deal of controversy in regard to the precise meaning of the *Cogito ergo sum.* What,

[1] Cousin's *Oeuvres de Descartes*, i. 156, 153, 239, 247.

in the first place, is to be understood by *Cogito*? Does it mean thought proper, conceptual thought? or is it a term for any mode of consciousness? In the third *Meditation* it seems to be used in the latter sense. "I am," says Descartes, "a thing which thinks, *i.e.*, which doubts, affirms, denies, knows a few things, is ignorant of many, loves, hates, desires, avoids, imagines and perceives."[1] Here the thinking being is the conscious subject in the most general sense: it is, in fact, what Kant distinguishes as the phenomenal or object-self. But, on the other hand, this object-self is known by the subject, and it is upon this knowledge that the *Cogito ergo sum* is based. By what faculty, then, does the subject know itself as an object? The answer seems to be given in the discussion of the criterion of truth. There we are told that the 'clearness and distinctness' which is required as the condition of real knowledge is not that of imagination or perception, but of understanding. The identity, *e.g.*, which is affirmed of a piece of wax is its identity in an infinity of possible changes, and there is no such identity in its sensible qualities, nor can imagination represent an infinity of changes. It is therefore thought which grasps the identity of the wax, not imagination or perception.[2]

Now, it would be obvious from this illustration alone that the identity of the thinking subject can, on Descartes' view, be known only by the understanding. But we are not left to draw this inference for ourselves, for Descartes expressly affirms that the thinking being is known only by 'intellection' or conception, and that

[1] *Ibid.* i., 263. [2] *Ibid.* i., 256-260.

imagination is not essential to the knowledge of self; nay, he maintains that imagination and perception are not essential to the existence of self, though we cannot conceive them except as modes of the self.[1] It would thus seem that, according to Descartes' more mature view, the knowledge of self is based upon pure thought or conception, and that the thinking subject is in its essential nature a pure intelligence. If so, the *Cogito* must be interpreted to mean: 'I think or conceive,' and the *sum* to mean: 'I exist as a purely thinking or conceiving being.' That this view is essential to Descartes' ultimate conclusion, viz., that the thinking being is an independent substance, will immediately appear. At the same time, there seems no reason to suppose that Descartes ever clearly distinguished between the self as a purely thinking being, and the self as conscious in general; and hence he was unaware of the difficulties involved in his assertion that the thinking self is an independent substance.

A second difficulty which has been raised in connection with the *Cogito ergo sum* is whether it is to be regarded as an inference or not. That it is not reached by a syllogistic process, Descartes explicitly affirms. It rests, he says, upon a simple 'intuition.' If the *sum* were the conclusion of a syllogism, we must first know that 'whatever thinks exists,' and from this proposition go on to reason: 'I think, therefore I exist.' This, however, is not the order of our knowledge. What we start from is the experience which we have within ourselves of the inseparability of the idea 'I think' from the idea 'I exist.' In fact no truth is reached by a syllogistic process: it is the very nature of

[1] *Ibid.* i., 323, 332.

our minds to advance from particular to universal propositions. The primary truths from which all others are derived are directly known and are self-evident. They rest upon 'intuition,' by which is meant "the conception of an attentive mind, so distinct and clear that doubt is impossible."[1] 'Intuition,' it must be observed, is not the presence in our minds of a single idea, but the connection of two ideas in a judgment. What gives the *Cogito ergo sum* its convincing force is the inseparability of the reality of thought from the reality of the thinking subject: all thinking has an immediate and necessary relation to an actual self, while its relation to any other reality is in the first instance open to doubt. Descartes usually prefers to say that the *Cogito ergo sum* is the typical instance of "clear and distinct perception." This, however, does not mean that it is not a judgment. As a judgment, it is not the analysis of a single idea into its constituent elements, but the necessary connection of distinct ideas. In this sense *Cogito ergo sum* is synthetic. In the indissoluble connection of thought and the subject which thinks there is revealed to us the identity of that which thinks with that which exists. In this case, therefore, there is no opposition between that which is thought and that which exists; and hence in the *Cogito ergo sum* we have, not merely an epistemological, but a metaphysical or ontological principle. Here at least we have the knowledge of a real existence.

Thirdly, does the *Cogito ergo sum* establish the separate and independent existence of the thinking subject? Would I still exist even if there were no external reality, including my own body? In the *Discourse on Method*

[1] *Ibid.* xi., 212.

Descartes speaks as if these questions must be answered in the affirmative. Finding it possible to doubt the existence of all external reality, he came to the conclusion that he was "a substance whose whole essence or nature consists purely in thinking, and which in order to be has no need of any place, nor is dependent on anything material." Hence, "this I, *i.e.*, the soul, by which I am what I am, is entirely distinct from the body, and though the body were not, the soul would not cease to be all that it is."[1] Here Descartes seems to assume that, because the subject is conscious of himself as a thinking being, it directly follows that he would still exist and think even if there were no reality but himself. Now, without dwelling upon the insuperable difficulties which such a doctrine involves, it is enough to point out that the separate existence of the thinking subject is not directly implied in the knowledge that such a subject exists. All that is directly contained in the *Cogito ergo sum* is that a thinking subject exists, but whether it would exist if there were no reality but itself can only be determined by wider considerations. It is possible that Descartes had such considerations in his mind when he wrote the *Discourse on Method*, and that these formed the suppressed link by which a transition was effected from the proposition 'I exist as thinking' to the proposition 'I exist as an independent substance.' Whether this is so or not, he came to see that the latter proposition is distinct from the former. Even in the *Meditations* he is not successful in drawing a perfectly clear distinction between them, but he shows something like an appreciation of it. "It is

[1] *Ibid.* i. 158.

very certain," he says, "that the knowledge of my existence does not depend upon things the existence of which is not known to me."[1] What he ought to have said is: "It is very certain that the knowledge of my existence does not depend upon the *knowledge* of things the existence of which is not known to me." The knowledge of my own existence, in other words, is a primary truth, and is so bound up with my self-consciousness, that though I should not be able to determine whether there are external things or not, it would still remain indubitable. This is at least an intelligible position for Descartes to assume, though its tenability may be questioned; and it seems probable that this was what he really meant, for we find him saying in the Preface to the *Meditations* that in the *Cogito ergo sum* it was not his intention to exclude the supposition that the thinking being is in his *existence* dependent upon external reality, but only to affirm that the *knowledge* of his own existence is prior to all other knowledge. Descartes does, indeed, deny that the existence of the thinking being is in any way dependent upon the existence of extended reality, but this conclusion is deduced from the *Cogito ergo sum*, not directly contained in it.[2] Our next question must therefore be, how the independent existence of the thinking subject is sought to be proved.

The faculty of thought or 'intellection,' Descartes tells us, is entirely distinct from the faculty of imagination. I cannot imagine a chiliagon, but I have no difficulty in thinking it. Now it is by thought alone that I know myself to exist, and therefore thought constitutes the

[1] *Ibid.* i. 252. [2] *Ibid.* i. 224.

very essence of mind. But if this is so, I am entirely and truly distinct from my body and all other extended reality, and can therefore exist independently. Thus, as Descartes thinks, the possibility of the existence of my mind, as a pure intelligence, is established. On the other hand, I have in my actual consciousness ideas of imagination and sense; and these, though they are modes of my consciousness, yet in their *representative* character imply a reality external to me. There is in me a certain 'passive faculty' of perception, a faculty which consists in apprehending the ideas of sensible things, and these can be reproduced in my imagination. That sensible perception does not belong to me as a purely thinking being is evident, (1) because my thought is independent of it, and (2) because I often have ideas of sense without my own consent. I must therefore refer these ideas to some substance different from me, which is sufficient to explain their *representative* reality. Considered simply as facts of consciousness, all my ideas are equally real, but as representative of things they have many degrees of reality. The idea of substance represents more being or perfection than that of a mode or accident, and the idea of infinite substance than that of finite substance. Now there are certain truths which are revealed to us by the 'natural light,' and which have the same direct evidence of their truth as the existence of self. One of those *communes notiones* is that there must be in the efficient and total cause the same degree of reality as in its effects. Not only can negation produce nothing, but the less perfect cannot produce the more perfect; while, on the other hand, we are not entitled to predicate of the cause more than is required to account for the effect. This principle must be applied in explanation of my ideas as

representative of reality. Now change of place, occupation of different situations, etc., cannot be conceived, and therefore cannot exist, apart from some substance of which they are modes. But these modes, though in my consciousness they appear as ideas of sense, cannot be attributed to me as a purely thinking being, since their clear and distinct conception implies extension but not intelligence. I must therefore refer them to a corporeal substance distinct from me, which gives to my ideas their representative reality. It of course does not follow that this substance as it is in itself corresponds to my sense-perceptions, for so far as these are obscure and confused they do not represent external reality as it actually is. What external reality is I know from my clear and distinct conception of it as a continuous magnitude, extended in length, breadth, and depth. Thus, by a necessary process of deduction, it has been proved that there exists corporeal as well as thinking substance, and that each is entirely independent in its own nature of the other. The substance in which thought immediately resides is mind: the substance which is the immediate subject of local extension and its accidents—such as figure, situation, and motion—is body. As two substances are said to be distinct when each can be conceived without the other, mind and body are separate and independent substances, which *only come into accidental relations to each other.*[1]

B. KANT'S CRITICISM OF RATIONAL PSYCHOLOGY.

It is evident, from the statement which has just been given, that Descartes is finally led by the natural development of his thought to give a different meaning to the

[1] *Ibid.* i., 323, 332, 333, 272, 273, 334, 453.

Cogito ergo sum from that which he originally assigned to it. In his first mind he employs the *Cogito* simply as an expression of the presence in all modes o consciousness of the self; but, as he goes on, he is forced to define the essential self as a pure intelligence, which in its real nature is entirely independent of imagination and perception. Such a limitation was in truth necessary, if he was to give plausibility to the conclusion that mind is entirely independent of body in its existence and operation. By a similar process of abstraction he separates from body all its modes or accidents, and identifies it with pure extended reality. But while he thus seems to secure the independent existence of mind and body, he finds it impossible, as Spinoza afterwards did, to preserve the parallelism between thinking and extended substance. For mind, as he is forced to admit, not only thinks itself but it also thinks body; and thus, while the latter is related only to itself, the former is related both to itself and to that which is affirmed to be independent of it. The difficulty therefore arises to explain how the mind, which is conceived to exist purely within itself, can yet go out of itself to comprehend body. This difficulty Descartes imagines that he has overcome by his theory of perception as a "passive faculty" of the mind, which is not essential to its existence as a pure intelligence. He cannot, however, deny that perception is possible only for a conscious subject, and hence he makes it a mode or accident of the thinking being, but a mode or accident which would not exist but for the causal activity of extended substance. Thus, as he thinks, the independent reality of mind and matter is preserved, while their accidental relation to each other is explained. That this

compromise is untenable it was part of the task of Kant to show; and this he did by challenging the whole dualistic basis upon which the doctrine of Descartes is founded. What Kant maintains is that Descartes, by confusing the phenomenal subject with the pure thinking subject, seems to account for the knowledge of the pure self as an object, whereas his argument demands that the reality of the pure self should be established entirely on the basis of pure thought. Rational Psychology therefore stands or falls with its power to prove the existence of an independent intelligence from the mere "I think." To do so, it has to make use of pure conceptions or categories; and such a use of mere forms of thought is, in his view, inadmissible, being based upon the false assumption that pure conceptions are capable of determinining the existence of an object apart from the concrete element supplied by perception. There is therefore no science of the soul as it is in itself. We are indeed conscious of the thinking subject as a unity, without which there could be no knowledge either of the phenomenal self or of other objects; but this unity is nothing but the permanent *form* of experience, not a separately existing *substance*. What the subject is in itself cannot be known from the mere unity of experience, which is but the mind's consciousness of the unity of its own action in determining objects, not the knowledge of its own independent existence.

The combination of ideas, in which thinking consists, is impossible, as Kant points out, apart from the unity of self-consciousness, and this unity is therefore the supreme condition of thought in all its forms. Self-consciousness is therefore the characteristic mark of all beings that think.

The thinking subject, however, is known as an object only in so far as there is a determination of inner sense, and hence it appears to itself in a succession of ideas, while all other objects are presented to it as spatial. "I, as thinking, am an object of inner sense, and am called soul, while that which is an object of outer sense is called body." The phenomenal-self as thus appearing in time is the object of Empirical Psychology; but, if attention is concentrated upon the pure unity of self-consciousness, it seems as if there might be constructed a Rational Psychology, which, borrowing nothing from experience, should be based entirely upon the nature of the self as the determining subject of all thought. Nor does there at first sight seem anything unreasonable in the attempt to construct such a Psychology. No experience whatever—no combination of ideas into a system of objects—is possible apart from the continuous unity of self-consciousness, while yet this unity is not derived from experience. How natural it is, therefore, to suppose that the thinking subject is entirely independent of experience, and that its nature can be determined purely by a consideration of it as self-conscious. Such a science, if it is possible at all, must obviously apply to the thinking subject none but transcendental predicates or pure conceptions. Accordingly we find that Rational Psychology affirms the soul to be a substance, simple, identical in all its changes and capable of relation to objects in space.[1]

That Rational Psychology is not a science it will be easy to show. The inferences which it draws all rest upon the assumption that the thinking subject can be determined as an object by the application to it of pure conceptions or

[1] *Kritik der reinen Vernunft*, A. 341—344; B. 399—402.

categories. There is, however, nothing to which these categories can be applied but the simple idea *I*, which is entirely empty of all content, and therefore admits of no further determination. What this *I* is in itself cannot be known, because it is never given apart from the thoughts by which it determines objects. All that we can say is, that it is the general form of all the ideas through which a knowledge of objects is obtained; and to take this general form of experience as an object which exists and can be known independently of experience is a mere confusion of thought or paralogism.[1]

The rational psychologist does not start, like Descartes, from a fact of experience—the fact of his own consciousness of himself as an object of inner sense; if he did, it would not be possible for him to determine the character of all thinking beings. What he maintains is that every thinking being is self-conscious. Nor is there anything illegitimate in this procedure; for we are entitled to predicate of a thinking being that without which we cannot conceive it, and no thinking being is conceivable which is not a self. The mistake of the rational psychologist lies in a different direction. He is perfectly entitled to say that every thinking being must be self-conscious, but this does not warrant his assumption that self-consciousness is possible independently of all experience. When we examine into the conditions of knowledge, we find that no real object is known simply by thinking: knowledge is possible only by the determination of a given perception by reference to the unity of consciousness which is the condition of all thinking. If, therefore, I am to know

[1] *Ibid.* A. 345—346; B. 403—404.

myself as an object, there must be a perception of myself; and this perception must be determined by reference to the unity of consciousness before there can be any knowledge of myself. It is thus evident that the consciousness of myself as the determining subject does not yield a knowledge of myself as an object: it is only in so far as the various determinations of myself are brought together in the unity of apperception that I have a knowledge of myself as an object. We may therefore be certain beforehand that the attempt of Rational Psychology to construct a science upon the basis of the idea of the pure self must end in failure. Having no manifold of perception to which the categories can be applied—since the pure *I* has no distinction within it—it must illegitimately borrow a manifold from experience in order to give plausibility to its contention that the thinking subject is an actual object of knowledge.[1]

(1) Rational Psychology is quite right in maintaining that in every act of thought there is a self which is the determining subject, the subject which thinks. But the consciousness of self as the subject which thinks is not the consciousness of the self as an object, which can be characterised as a substance. The fact that in all determination of objects the consciousness of self is implied does not prove that there underlies the unity of consciousness a single permanent and indestructible substance. It is quite conceivable that there should be unity in consciousness with a change of substance, and therefore the former does not imply the latter. The unity of self-consciousness only shows that so long as there is a consciousness of objects there is a consciousness of

[1] *Ibid.* A. 346—348; B. 404—407.

self: it can never warrant the inference that there is a thinking substance which is permanent and indestructible.

(2) Rational Psychology is right in affirming that in every act of thought the subject is conscious of its own unity. But the unity of self-consciousness does not prove the existence of an underlying simple substance. There is no knowledge of substance apart from a manifold of perception, and thought supplies no manifold of perception. Hence the unity of the self in thinking tells us nothing as to the existence of a simple substance. The logical unity of the *I* is confused by the rational psychologist with the objective unity of a substance, which is not given in thought nor can be inferred from the mere unity of self-consciousness.

(3) Rational Psychology is right in maintaining that the self is identical with itself in all its thinking. But from this identity in the subject of thought we can infer nothing in regard to the identity of a substance supposed to underlie thought. The only way in which we could have a knowledge of such a substance would be by its presentation in perception, and such a perception is not contained in the mere consciousness of the subject as identical in all its determinations.

(4) Rational Psychology is right in saying that I am conscious of myself as distinct from all objects in space. But it by no means follows that I could exist without a body and its accompanying sensibility, or that I should be conscious of myself, if I had no knowledge of things as outside of me.[1]

There is, then, no way of passing from the conscious-

[1] *Ibid.* B. 407—409.

ness of the thinking subject to the knowledge of the self as an object. The mere logical analysis of thought can never be the basis for synthetic propositions in regard to the existence and nature of a real object. In truth Rational Psychology is in fundamental opposition to the whole principle of Critical Philosophy. If synthetic *a priori* judgments could be based upon the emptiest of all our pure conceptions, without any aid from experience, there is no reason why we should not have a complete *science* of reality. Rational Psychology maintains that "every thinking being is in virtue of its thinking a simple substance." If a synthetic *a priori* judgment such as this can be based upon a pure conception, apart from all relation to a possible experience, Criticism is "dethroned," and "Vortex reigns in its stead."[1]

The danger, however, is purely imaginary. The claim of Rational Psychology to take rank as a science rests upon a mere misunderstanding. The thinking being assumes a knowledge of itself because it imagines that it may determine its own nature by those categories which express absolute unity. No supposition is more natural. Without unity of consciousness there could be no synthesis of the manifold of perception, and in this synthesis consists pure conception. Thus self-consciousness is the condition of all unity in knowledge, while it does not itself stand under any higher condition. This explains why the thinking subject seems to be a substance, which is simple, identical, and the correlate of all existence. It is regarded as a *substance*, because it is present in every act of thought; as *simple*, because it is always a conscious unity; as *identical*,

[1] *Ibid.* B. 409—410.

because in every act of thought the consciousness of that which thinks is implied: and as the *correlate* of all existence, because no object can be known which is not relative to it. The determination of the thinking subject by these categories is, however, quite inadmissible. No doubt the thinking subject knows the categories: it is aware of the functions of synthesis in which all thinking consists, and as these are impossible apart from the consciousness of its own unity, and are employed in the determination of the manifold of perception, it knows all objects through itself. But it does not know *itself* through the categories, for these have objective meaning only in relation to a given manifold: it is only in knowing objects that it becomes conscious of itself as the unity to which all objects are related. Thus the knowledge of objects through the categories is not a knowledge of itself as an object to which categories may be applied. To know itself through the categories as an object would be to determine itself through them. But this is impossible; for without the unity of self-consciousness no knowledge of objects is possible, and therefore that unity cannot be the result of its own synthetic activity in the determination of objects. For, we must remember that objects exist for the subject only as the product of its synthetic activity in the determination of the manifold of perception; hence the subject could be an object for itself only if it were the product of its own synthetic activity. "It is quite plain," says Kant, "that I cannot know that as an object which I must presuppose before I can have any knowledge of an object." The determining self —the self which exercises its synthetic activity in the constitution of objects—cannot know itself as an object:

the only object-self is the "determinable" self, *i.e.* the self which is determined as a phenomenon in time, but only in contrast to phenomena in space.[1]

Now, Rational Psychology supposes that the "determining" self can be known as an object by the application of categories to the pure idea of self. The supposition is false. "The unity of consciousness, which is the supreme condition of the categories, is confused with a perception of the self as object, and hence it is supposed that the category of substance may be legitimately applied to the thinking subject." As there is no manifold of perception by which the determining subject could be constituted as an object, obviously there can be no knowledge of it as an object. The only manifold to which it can apply its synthetic activity is the manifold of perception, which does not proceed from itself but is given to it; and therefore, while it can determine other objects and become conscious of its own synthetic activity in determining them, it cannot determine itself as an object. Similarly, the subject, as the ground of the idea of time, cannot determine its own existence by the idea of time; and therefore it has no manifold to which the categories can be applied.[2]

From what has been said, the fallacy of the Cartesian *Cogito ergo sum* is obvious. Descartes imagined that he had proved the independent existence of a pure intelligence from the spontaneity of thought. But the *Cogito* from which he starts is the consciousness of himself as a determinate object, *i.e.* he begins with the "determinable" self, the self as an object of inner experience. But from this self nothing can be concluded as to the ultimate nature of the

[1] *Ibid.* A. 401. [2] *Ibid.* B. 422.

"determining" self. The *sum* of Descartes therefore means: "I exist as an object of inner sense." And this shows that there is no inference whatever; for the *Cogito* already means: "I am an object of inner sense." Now, admitting that I am conscious of myself in all the phenomena of the inner sense, it by no means follows that I have a knowledge of myself as a pure intelligence. The consciousness of the self as an object of inner sense is possible only through the consciousness of something permanent in space. It is in the regress from the consciousness of objects in space that I become aware of my own states as a temporal series, and therefore I have no consciousness of myself as an object apart from the consciousness of things without me. Obviously, therefore, Descartes cannot legitimately infer the independent existence of the thinking subject from the *Cogito* as he understands it. On the other hand, if the *Cogito* is taken in the sense of pure thought, the inference to the existence of a being, which exists purely as thinking, must be based upon the proposition that "whatever thinks exists purely as thinking." This proposition, however, cannot be based upon the unity of self-consciousness; for the "I think" merely expresses the possibility of self-consciousness as the condition of experience, and therefore tells us nothing as to the existence of a pure intelligence, having no relation to sensibility. Thus the *Cogito* of Descartes does not prove the existence of a pure intelligence, but merely expresses the possibility of the consciousness of self as the universal form of the inner sense.[1]

The source of the dialectical illusion of Rational Psychology is now perfectly obvious. An Idea of reason—the Idea of a pure intelligence—is confused with the perfectly

[1] *Ibid.* B. 422 n.

indeterminate conception of a thinking being, and it is assumed that what is true of the former is true of the latter. In order to make clear to myself the ultimate condition of a possible experience, I abstract from all actual experience and concentrate attention upon the self. Then I falsely assume that I can be conscious of my own existence apart from experience and its conditions. Thus I confuse the possible *abstraction* of my empirically determined existence—the mere possibility of self-conscious experience—with the imaginary consciousness of the *separate* existence of my thinking self. Hence I come to believe that I have a knowledge of the substantial in me as the transcendental subject, while in fact I have in my thought only the unity of consciousness, which is presupposed as the mere form of my experience.[1]

As we have seen, the proposition "I think," or "I exist thinking," is an empirical proposition. As such it presupposes empirical perception, and the object thought is therefore a phenomenon, not a thing in itself. Now, since this is true, not merely of external things, but of the self as an object of inner sense, it seems as if the thinking self were merely a phenomenon, and that our whole consciousness is a mere illusion. This conclusion, however, by no means follows. Thinking, viewed purely in itself, is merely the faculty of combining a manifold, whether that manifold is sensuous or intellectual. Hence when I concentrate attention upon the faculty of thought, abstracting from the manner of my perception, I am conscious of myself neither as I am nor as I appear to myself: not the former, for without some manifold I cannot be an object for myself; not the latter, because I am a phenomenal object for myself

[1] *Ibid.* B. 426—427.

only as thinking the manifold given to me in sense. The conception of myself simply as thinking is therefore merely that of an object quite generally, *i.e.* an object conceived apart from the manner in which it can be perceived. In this way no doubt I have the idea of myself as a *subject* of thought, or even as a *ground* of thinking, but such an idea is very different from the determination of myself as a *substance* or *cause*. To know myself as substance or cause I must have a sensuous manifold to which I can apply these pure forms of thought, and such a manifold is excluded by the very attempt to determine myself as a pure intelligence. The idea of myself as a thinking subject is reached by abstraction from the determination of myself as presented to me in the inner sense, and thus the Idea of myself as a pure intelligence arises for me in contrast to the consciousness of myself as a phenomenon. To this Idea no known object corresponds. If, indeed, I could supply a manifold out of myself, my thought would then have a content to which it could be applied, and I should have an actual knowledge of myself as a pure intelligence; but, as the manifold is not supplied by me but given to me, I cannot have any such knowledge. The Idea of myself as a pure intelligence must therefore always remain an Idea, so far as knowledge is concerned. There is, however, nothing to prevent me from holding that in my real nature I am a permanent and self-determining being; and this supposition is converted into a certainty by a consideration of the Practical Reason. No line of thought, however, can justify the contention of Rational Psychology that I have actual knowledge of myself as an independent substance. I can only know myself as a phenomenon, and such knowledge can never be adequate to the idea of myself as an

absolute unity. "The understanding in us men is not a faculty of perception, and though a manifold is supplied to it by the sensibility, it cannot take up that manifold *into itself*, so as to combine what may be called *its own* perception." The manifold of sense, in other words, is by its very nature as spatial and temporal never a whole, and therefore the synthesis by which thought combines it into objects can never be complete.[1]

But while there can be no knowledge of a pure intelligence, the Idea of such an intelligence is not without value even for theoretical reason. Though it has no other than a regulative value, it supplies us with the ideal by reference to which we may seek to determine the phenomenal self. The substantiality, simplicity, self-identity and independence of the soul "are to be regarded merely as the schema for this regulative principle, not the real ground of the properties of the soul. These may rest upon quite other grounds, which are not known to us; nor could we in any proper sense know the soul by means of these supposed predicates, even if they were admitted to apply to it, since they constitute a mere Idea, which cannot be presented *in concreto*. Nothing but advantage can come from such a psychological Idea, if we are careful to observe that it is only an Idea, *i.e.* that its sole value is to reduce the phenomena of our soul to system by the exercise of reason."[2]

In the statement of Kant's criticism of Rational Psychology just given his own order of exposition has been pretty closely followed. Perhaps it may make the matter somewhat clearer if we follow the natural order of ideas which was really operative in his mind. (1) His first point is,

[1] *Ibid.* B. 428—31; B. 153. [2] *Ibid.* A. 682; B. 711.

that the 'I think' is ambiguous. Descartes, in his *Cogito ergo sum*, starts from the empirical proposition, that in all the modes of my consciousness I am conscious of myself. The *I* is here manifestly merely the consciousness of self which accompanies all my consciousness. As this consciousness is simply the unity which is present in the series of my ideas, the self is here properly the phenomenal self as the object of inner sense. From the phenomenal self, however, no inference can be drawn as to the independent existence of the thinking subject. (2) Hence the thinking or determining subject must be distinguished from the phenomenal self as presented in the inner sense. This is the step taken by Rational Psychology, which abstracts from all the concrete determinations of the self and seeks to establish the existence of a thinking substance simply from the idea of the thinking subject. The procedure of Rational Psychology is, however, illegitimate; for the determining subject cannot be known as an object through categories of which it is itself the source, and which have no meaning except in relation to a manifold of perception that it does not itself originate. (3) But though the determining subject is not identical with an independent substance, the Idea of an absolute subject still remains, and is valuable as a regulative principle in systematising the complex phenomena of our inner experience. (4) That Idea further serves to indicate that the self as the object of inner sense is merely a phenomenon. There is therefore nothing absurd in the supposition that the self in its real nature is independent and self-determining, and thus the way is left open for that rational faith in freedom and immortality which Kant afterwards seeks to base upon the moral consciousness. Anything like a com-

plete discussion of these points would involve an examination of the whole Critical Philosophy, but something may be said on each of them.

(1) Kant's main objection to Descartes, is that his *Cogito ergo sum* is an empirical proposition, which presupposes for its possibility the consciousness of objects. Now, there is no doubt that Kant has here put his finger upon the fundamental defect in the whole philosophy of Descartes. The method of Descartes is one of abstraction. He overlooks the fact that, when he begins to analyse the contents of his consciousness, he has before him a world which has grown up for him in the complex process of experience, and already involves the consciousness of objects as contrasted with and yet related to the consciousness of himself. Hence, though by reflection he can distinguish between these two forms of consciousness, it by no means follows that the one is separable from the other. Descartes, however, takes the logical distinction of subject and object for a real separation. He imagines that the capacity of abstracting from the consciousness of objects is a proof that the consciousness of self is possible apart from the consciousness of objects. In truth, that capacity no more proves that the self can be known without a knowledge of objects than the capacity of abstracting from a circumference proves that a centre can be known without a circumference. As Descartes assumes that the consciousness of objects is not essential to the consciousness of self, he naturally maintains that the consciousness of his own inner states is possible without the consciousness of his own body. Thus, as it seems to him, the consciousness of his own ideas and of himself as their subject is direct and indubitable, while the consciousness

of all other objects, including his own body, is indirect and problematic. Now, what Kant maintains is that the consciousness of self, so far as it means the consciousness of self as present in all the determinations of consciousness which occur in time, is inseparable from the consciousness of external things; nay, that the explicit consciousness of the self as an object of inner sense is posterior to the consciousness of objects in space. A subject having merely a succession of ideas would not be conscious of self, because in pure time there is nothing permanent with which the succession of ideas may be contrasted. Thus the consciousness of the self as presented in time is relative to the consciousness of permanent objects as spatial. When, therefore, Descartes assumes that the consciousness of self is independent of the consciousness of objects he is guilty of a radical error, and almost of an inversion of the truth. He takes the object-self as if it were knowable by itself, whereas it is but the mind's consciousness of its own successive apprehension of external things, and therefore is impossible without the knowledge of those things. Hence the *Cogito* of Descartes, taken in the sense of the conscious determinations of inner sense, can afford no warrant for the independent existence of the conscious subject. The object-self is merely one aspect of the total consciousness of objects as contained in the unity of a single experience, and therefore it cannot be regarded as an independent reality.

So far Kant's criticism of Descartes is unanswerable. Kant, however, is not content to say that the consciousness of self is mediated by the consciousness of external objects, but he maintains that the self which is thus

known is merely phenomenal. This conclusion is bound up with his whole doctrine of the forms of mind as peculiar to the human subject and as simply the manner in which the knowing subject combines a given manifold of sense in the unity of experience. Now, we may admit that there is no consciousness of self apart from the consciousness of objects, without admitting that the whole of our experience, including the self as an object, is purely phenomenal.

In his analysis of experience, as he finally presents it, Kant maintains that apart from all activity on our part, whether in the unreflective synthesis of imagination or the reflective synthesis of understanding, we have affections of sense, which must be attributed to things in themselves. These affections cannot be converted into the perception of objects unless there is a determination of inner sense, *i.e.* unless there is a successive synthesis of those affections as space *quanta*, which gives rise to a spatial image. But, when we direct attention to the successive acts by which this spatial image is formed, we become conscious of the synthesis as successive, *i.e.* as in time. Thus the explicit consciousness of the inner life as in time is posterior to the consciousness of the spatial image and presupposes it. The experience of our own spontaneity in determining the spatial object is a new experience in this sense, that by directing attention to the activity of the subject in perception we for the first time become explicitly conscious of the two aspects of perception, the inner and the outer, and only in this consciousness is there, properly speaking, any inner and outer. More than this distinction of inner and outer perception, however, is implied in the consciousness of an

actual object of experience. For such an object must be *permanent*, and therefore the consciousness of an object as actual implies the consciousness of something as permanent. How, then, do we come to relate the transient affections of sense to something permanent? We could not be conscious of these affections as changing upon us, were we not conscious of succession; but there can be no consciousness of succession without the consciousness of something permanent. Under our consciousness of successive sensations there must therefore lie the conception of something that is not successive. A real change, again, implies a consciousness of the identity of the permanent in different successive states. And, as no two objects can be known as co-existing, unless we are conscious of them as reciprocally determining each other in their changes, we must view all co-existent objects as connected in a single system of experience. To this Kant adds, that we can be conscious of the permanent only in *external* perception. For time is a pure flux, and there is therefore nothing in it to give us the consciousness of the permanent. Hence we should never attain to the consciousness of the succession of our inner states, were we not conscious of what is in space. Inner experience presupposes outer experience. The content of the one is the same as the content of the other, but in the former we become aware of the process by which outer experience is realized. And it is by a further abstraction that we become conscious of the self as a unity presupposed in that process.

Now, the doctrine of Kant, that there are affections of sense, in relation to which the subject is purely receptive, is open to serious objection. Kant himself admits that

such affections do not exist as an object of consciousness, but can only be described as an unconnected 'manifold.' But an unconnected 'manifold' is really one of those fictions of abstraction which indicate a defect in our own theory. Kant speaks of it as the 'matter,' which becomes an object for the subject, when the subject combines the determinations of this 'matter' under the 'form' of time into an image or perception, because this synthetic process is possible only under the unseen guidance of a conception. Now, there is no doubt a sense in which we may speak of the 'matter' of sensation as existing apart from the conscious activity of the subject. A being may be sensitive without being conscious of sensation, just as it may have life without being sensitive; and, if we are considering the transition from the sensitive to the conscious life, we may call the former the 'matter' in the sense that it contains potentially what in consciousness is contained explicitly. But the sensitive being cannot be taken as the measure of reality; for, on the same principle, the plant or even the mineral may with equal justice be regarded in the same way. The only measure of reality is the intelligent subject. The sensitive being has no consciousness of its states as they really are: it is not aware that they are determined under fixed conditions, and that those conditions presuppose the whole complex system of things. It is only for the conscious subject that sensations exist as objects, *i.e.* as distinguishable elements in a "cosmos of experience." When sensations become an object of consciousness, they no longer exist as sensations, and therefore they are not a 'matter' to which the subject has to *give* 'form,' but they are already a *formed matter*, *i.e.* they are distinguishable elements in a known

world. The subject does not *bring* to the 'matter' forms already belonging to itself as a subject. The subject exists for itself only in so far as it is conscious; the 'matter' exists only as an object for this conscious subject; and therefore subject and object exist only in distinction from and yet relation to each other. There is, therefore, no 'manifold' except as the subject is conscious of an objective world. Now, the consciousness of an objective world, as it exists only in the process of consciousness, is not full-formed, but is in continual development, a development which is at once an integration and a differentiation. The simplest mode in which the consciousness of objectivity arises is in the perception of things as having properties which seem to attach to them as individual things, or in the perception of the changes which occur in succession, but seem to involve no deeper mode of relation. It is this stage of consciousness which Kant has in his mind when he speaks of the "synthesis of imagination." He sometimes allows himself to speak as if in this synthesis there were no conceptual activity. But as conceptual activity is simply the consciousness of the unchanging conditions or relations of known objects, there can be no consciousness of objectivity which does not imply the activity of thought. The difference between the earlier and the later stages of consciousness can only be between a less and a more adequate conception of the world, not between an imaginative and an intellectual synthesis. The world conceived as a collection of individual things, each having its own properties and determined quantitatively, is a less adequate conception than that of the world as a number of substances, the changes of which are causally connected, and which act and react

on one another; but it is the same world which is conceived in these two ways, and therefore the process of knowledge is not from a world which is perceived in the one case and thought in the other, but from a world less adequately thought to a world more adequately thought.

When we look at the matter in this way, we must obviously give up all opposition between the conscious subject and the objective world, so far as that opposition implies that the subject has forms of conception belonging to itself which it brings to bear upon the 'manifold' of sense in order to constitute an objective world. The so-called 'forms' of thought are just the unchangeable relations which the objective world involves. The intelligent subject, in becoming conscious of those relations, learns that nature is a system, and it is only in and through the consciousness of this system that he becomes conscious of himself. On the other hand, the return upon the consciousness of self is something more than the consciousness of the subject for which the system of nature exists: it is the consciousness of self as related to the system of nature in such a way that the latter becomes the instrument of the peculiarly human life, the life which consists in the realization of ideals. While, then, we must admit that there is no consciousness of self apart from the consciousness of the world, we cannot admit that the self as known is merely a phenomenon. The phenomenality of the self stands or falls with the phenomenality of the world. For, if the distinction drawn by Kant between the 'forms' of the mind and the 'matter' of sense is inadmissible, we have to admit that the knowing subject has, in the consciousness of objects, a knowledge, though not a complete knowledge, of objects as they really are. And as these

objects exist for it only on presupposition of its own activity in comprehending them, they enter into and become an integral element in the development of its own life. Thus the consciousness of the system of nature presupposes the consciousness of self, while at the same time the return upon the consciousness of self shows that, while the system of nature exists only for the knowing subject, the knowing subject exists only for itself or through its own self-activity. We are thus brought to a consideration of what Kant calls the 'determining' self, which he maintains to be, not an object of knowledge, but merely the indefinable subject of self-conscious thought.

(2) Kant's view is that the consciousness of self as the subject of all thinking is not identical with the knowledge of a self which exists independently of all objects, nor can we legitimately infer the one from the other. For the subject-self is merely that which thinks or combines the manifold of perception, and apart from the synthetic activity by which the manifold is combined it is not known at all. We could only have a knowledge of the subject-self, if it were legitimate to take it as a real thing and apply categories to it. But such an attempt to know the subject of the categories as an object determinable through them involves a hysteron-proteron; for the subject-self is just the unity of thought implied in each of the categories, and to regard this unity as the product of the categories is to make the unity of all thought depend upon its own forms. That which is presupposed in all thinking cannot be the product of thinking. The subject-self is therefore not determinable by the categories as an object. Rational Psychology simply confuses the unity of thought as implied in all experience with a real subject

existing independently of experience, not seeing that the subject-self is merely the form which our experience assumes, not an independent reality.

Now, there is no doubt that Kant's criticism of Rational Psychology tells with invincible force against all theories which attempt to determine the nature of the intelligent subject by affirming the existence of an independent 'soul' or 'thinking substance,' having a character of its own apart from all relation to the system of nature. But it by no means follows that the intelligent subject cannot be known. It certainly cannot be known simply as one object among other objects, since it is that for which all objects are; but to deny that it is part of the system of nature is not to affirm that it is incomprehensible. As Kant himself points out, the consciousness of the system of nature presupposes that the subject is capable of the consciousness of self, and it is in the return from the consciousness of the world that the consciousness of self arises. Now, the very possibility of such a return implies that the consciousness of self is something more than the consciousness of the world. It is therefore not surprising that the intelligent subject, for which alone there is any known world, should refuse to be characterized in the same way as the world. The highest category by which the world is characterized is that of a community of substances acting and re-acting upon one another; and if we attempt to determine the nature of self-conscious beings in this way, we leave out what is characteristic of them as self-conscious. While, therefore, it must be admitted that the categories by which nature is determined as a mechanical system are inadequate as a determination of the subject for which nature exists, it

does not follow that the thinking subject cannot be determined at all. It can be determined as what it is, *viz.* as a self-conscious and self-determining activity.

Kant's objection to the application of the categories to the thinking subject rests upon two grounds; first, that in the pure subject there is no 'manifold' to which categories can be applied; and, secondly, that the application of categories to the thinking subject would make it its own product. (*a*) As to the first of these points, it is of course obvious that, if the thinking subject is separated from all objects, and even from its own modes of activity, it is perfectly empty, and therefore admits of no determination. Kant says that, in this separation, it is merely "the subject which thinks," not an object of thought. He does it too much honour. Separated from what he calls the object of inner sense, but which is really on his own showing the determinate modes of its activity in the comprehension of the world, it is not a thinking subject, but the mere abstraction of a possibility, which is the possibility of nothing in particular. As such it is neither subject nor object, but pure nothing. Thinking has no meaning except as determinate thinking, and as, on Kant's view, all determinate thinking belongs to the object-self, what remains after the elimination of the object-self is not the subject-self but a pure blank. It is not surprising that this fiction of a pure self should be declared unknowable: it is unknowable for the simple reason that it is nothing at all. It can neither be perceived nor thought: it is in fact what Hegel calls the "pure being which is pure nothing." We cannot, therefore, separate the 'determining' from the 'determinable' self. The 'determinable' self is simply the 'determining' self

in so far as it is engaged in thinking. But, further, the 'determinable' self is not separable from the objective world, which is just the system of objects that it knows. As this system of objects exists only for the thinking subject, we have in it the 'manifold' which is required for the application of the categories, and through which the knowing subject may be partially determined, or rather we have in it the known world which exists only in and through that process of differentiation and integration that constitutes the activity of the knowing subject. There can therefore be no difficulty in knowing the nature of the thinking subject, so far as it is revealed in the process of knowledge by which the world becomes for it an object. The nature of the 'determining' subject is known in the process by which it knows; and, though this does not exhaust its nature, it reveals that nature in one of its phases.

(*b*) It is now easy to deal with Kant's second point, that the determining subject cannot be known through the categories, because it would then be its own product. The answer is, that it *is* its own product. The categories, on Kant's view, are special modes of synthesis, the forms by which the mind determines the manifold, and so constitutes for itself a world of objects. It must be observed, however, that as modes of synthesis the categories have no existence except in the actual process by which objects are constituted. In other words, they are simply certain fixed ways in which the thinking subject is active in the process of knowledge. Thus, apart from the activity of the subject, there are no categories and no objects. But the subject is self-conscious only in the active process by which it builds

up the world of its knowledge, or rather this is one of the ways in which it comes to self-consciousness. There is therefore no self-consciousness prior to the activity by which the world is formed as a connected system, or, what is the same thing, the self-conscious subject exists only in the process by which its self-consciousness is realized. Thus there is no mind which is not self-produced. We must define mind as a self-conscious energy, which in all its activity is at once object and subject. This does not mean that the subject is completely self-conscious. Complete self-consciousness would imply infinite self-activity, and our self-consciousness is therefore never complete; but, though it is not complete, it is always a unity and always the precise reflex of its own activity. There is no disharmony between the 'determining' and the 'determinable' self, because the latter is just the self viewed as an object, the former the self viewed as a subject, and in self-consciousness subject and object are combined in a unity which embraces the distinction. The unity is impossible apart from the distinction, the distinction apart from the unity, and neither has any meaning except in the actual process in which this concrete self-consciousness arises. Thus, in point of fact, the thinking subject is the product of its own activity: which is merely to say that it can only be defined as a self-active being, a *causa sui*, which is at the same time conscious of its own self-activity.

A similar answer must be given to Kant's contention that the conscious subject cannot be brought under the form of time, because it is itself the source of time. It is quite true that time has no meaning except for a conscious subject, but it does not follow that the conscious

subject can be determined without reference to time. The self-conscious life consists essentially in the process by which the subject realizes itself and becomes an object for itself, and this process is unmeaning apart from time. Kant's real objection to the determination of the thinking subject by the idea of time is his assumption that what is in time cannot be a unity. But, as time is, on his own showing, not a thing in itself, but merely a form in which the successive acts of the conscious subject are known as successive, we cannot properly speak of the subject as *in* time, but only as conscious of its own activity as a process *involving* time, one aspect of which is that it is not complete in a single act, but is continuous. It is perfectly true, that if by abstraction we concentrate attention upon the mere fact that the process of self-realization in knowledge implies time or succession, we seem to destroy the unity of the thinking subject, since in a mere series there is no unity. But, though the process of self-consciousness is successive, it is not a mere succession, but the development of a self-activity, which realizes itself in time, and grows in complexity without ever losing its unity. To thrust the thinking subject out of time is to deny that thinking is a process; to say that the thinking subject is conscious of its activity only as a succession is to overlook the self-conscious unity without which there could be no consciousness of its activity as successive. The element of truth, therefore, in Kant's contention, that the subject as the source of time cannot itself be in time, is this: that the subject cannot be determined as merely successive, but only as realizing itself in a temporal process by which it makes itself its own object.

(3) Kant tells us that the Idea of the self as an absolute unity is merely regulative. This doctrine, however, draws its sole support from the assumption that the determining subject cannot be made an object for itself, but as known is merely a phenomenon. Now, with the denial of the absolute distinction of phenomena and noumena, the abstract opposition between the Idea of self and the actual self must also be denied. No doubt the self must always be an Idea in this sense, that complete self-consciousness is impossible in a being whose conscious life is in process of development. For, as self-consciousness is possible only in the process of knowledge, to affirm complete self-consciousness is to affirm completeness of knowledge, and knowledge is never complete. But, though knowledge is never complete, it is always a development within the unity of a single self-consciousness. Kant himself maintains that no experience is possible without the resumption of objects within the unity of the self-conscious subject. If so, we are entitled to say that no possible extension of knowledge can destroy the unity of the knowing subject. The Idea of completed knowledge can never warrant the assumption that such knowledge would consist in the realization of a self-consciousness exclusive of the consciousness of objects. The Idea of completed knowledge is properly that of a self-consciousness in which the object has been completely carried over into the subject, and has therefore become in all its determinations combined with the unity of the self. Such a perfect subject-object our self-consciousness is not, because our self-consciousness is a process; but the conception of such a unity is the presupposition of the consciousness of ourselves as beings in whom "knowledge grows from more to more." Nor can we regard this ideal

of a perfect subject-object as merely regulative, since apart from it we should not be conscious of the incompleteness of our knowledge.

(4) Kant is himself forced to admit that the consciousness of self gives rise to the Idea of a pure intelligence, and that it is by reference to this Idea that we condemn our knowledge as merely phenomenal. Now, if self-consciousness were merely the consciousness of a unity which manifests itself in the determination of a given manifold, it could never give rise to the Idea of a unity in which the opposition of subject and object is completely transcended. For that unity cannot consist in the mere elimination of the distinction of subject and object—which could only result in the idea of a purely abstract being, with no determinate character—but in a concrete unity in which the distinction of subject and object is preserved while it is embraced within a single self-consciousness. Thus, the consciousness of self, so far as it is the source of an ideal of knowledge which carries us beyond the knowledge of the system of nature, can only mean the consciousness of a subject which determines itself as an object and yet maintains its own unity. Such a self-conscious unity, as Kant admits, is not self-contradictory: it has to be postulated as the explanation of the moral consciousness, though it can never be made an object of knowledge. And no doubt if we thus identify the moral consciousness with all that is distinctive of the self-active life of man, it will follow that the idea of the self as it is in its true nature is possible only through the practical, as distinguished from the theoretical, reason. But such an identification of the self-conscious life with the moral consciousness is based upon an abstract opposition of theoretical and practical reason which cannot be main-

tained. The self which is the subject of morality is the same self which manifests its activity in the construction of the knowable world, and when by a regress upon the idea of self the subject becomes conscious of itself as the source of the moral ideal, that ideal does not fall beyond the circle of knowledge. The self as the subject of morality is the self as having the consciousness of its essential identity with other selves, and this community of self-conscious persons is an object of knowledge not less than the system of nature. Thus within the sphere of knowledge is included the consciousness of possible subjects of social or spiritual being. Knowledge and will are [illegible] self-conscious unity [illegible] and knowledge. The point of view of knowledge emphasizes [illegible] consciousness of objects, or rather of the subject as [illegible] objects for itself, in which must be included [illegible] world of human interests; the point of view of will accentuates the consciousness of self as the subject which realizes itself in objects, and especially in other self-conscious beings; but as the same self is manifested in both, knowledge and will are merely distinctions within the one self-conscious subject, which have no meaning apart from each other. If therefore we grasp the one self-conscious activity in its totality, we shall no doubt distinguish the subject as knowing from the subject as willing, but this distinction we shall again carry back to its unity, recognizing that the rational subject is for itself at once object and subject, self-determined and self-determining.[1]

[1] For a further discussion of the relation between theoretical and practical reason, see Note XII.

X. LOTZE'S THEORY OF KNOWLEDGE.

THE doctrine of Mr. Spencer, criticised in the text,[1] that the distinction or rather separation of subject and object is a fundamental law of consciousness, is the natural product of English empiricism, though in seeking to defend it the author employs the Hamiltonian principle of the 'inconceivability of the Unconditioned'—itself a modification of the Jacobian theory of 'faith' (*Glaube*). The doctrine of Lotze, on the other hand, does not maintain the antithesis in the same downright way; but, under the influence of a somewhat superficial view of the Kantian distinction between 'phenomena' and 'things in themselves,' it contrasts the theory of knowledge (Epistemology) with the theory of reality (Metaphysic). As this more subtle form of dualism has commended itself to various thinkers of the present day, both in England and Germany, it seems advisable to ask how far it can be accepted.

"All we know of the external world," Lotze tells us, "depends upon the ideas of it which are within us." Hence "it is, so far, entirely indifferent whether with Idealism we deny the existence of that world, and regard our idea of it as alone reality, or whether we maintain with Realism the existence of things outside us which act upon our minds. On the latter hypothesis, as little as the former, do the things themselves pass into knowledge; they only awaken in us ideas, which are not things. It is, then, this varied world of ideas within us, it matters not where they may have come from, which forms the

[1] Ch. viii., pp. 151-190.

sole material given to us, from which alone our knowledge can start."[1]

One of the most suggestive sayings of Kant is, that "scepticism would have been a useful regress, if it had gone back over the ground traversed by the dogmatists to the point where their wanderings began."[2] At first sight Lotze may here seem to be acting upon the hint of Kant. His aim, it may be thought, is to bring to light the common pre-supposition of 'Realism' and 'Idealism,' as the first step in the transition to a higher point of view. On closer examination it will be found, I think, that his method is very different. By 'Realism' he evidently means the doctrine that there is an 'external world' lying beyond the mind, which 'awakens in us ideas'; and by 'Idealism' the doctrine that there is no world without the mind, distinct from the 'ideas' which are 'within us.'[3] As thus understood, the former view is represented by Locke, the latter by Berkeley in his first mind. As we have already seen,[4] both theories are beset with insuperable difficulties. Locke, starting from the assumption of external things acting upon the mind, soon found that knowledge must be limited to the 'ideas within us' at a given moment, and hence he was led to 'suspect a science of nature to be impossible.' Berkeley, on the other hand, trying to find the criterion of reality in particular ideas, was unable to explain consistently how there

[1] Lotze's *Logic*, Eng. tr., ii., § 306.

[2] Kant's *Werke*, ed. Hartenstein, viii. 523; cf. Caird's *Critical Account of the Philosophy of Kant*, I. 6.

[3] It can hardly be necessary to say that 'Idealism,' in Lotze's sense of the term, is not to be confounded with what in this work is called 'Speculative Idealism.'

[4] Note IV., pp. 347 ff.

could be universal propositions; and Hume was therefore led to discard all universal propositions, with the result that even mathematical propositions were found to be contingent. It thus seems obvious that, if we are to apply the method suggested by Kant in criticizing 'Realism' and 'Idealism,' we must challenge the pre-supposition common to both, viz. that knowledge consists in particular ideas 'given' to the mind independently of the constructive activity of thought. The source of their weakness is the assumption that 'experience' is reducible to states of the individual subject. But this is not the defect which Lotze finds in them. He tries to avoid the discussion of the question whether there is or is not an 'external world,' *i.e.* a world lying beyond the mind, by saying that whether there is or is not such a world, at any rate the "varied world of ideas within us . . . forms the sole material given to us, from which alone our knowledge can start." In other words, Lotze agrees with 'Realism' and 'Idealism' in maintaining that the beginning of knowledge consists in our having 'ideas,' which may or may not be found to imply a world beyond the mind, but which are in themselves merely states of the individual subject. And no doubt, if we simply ask for the point of agreement between 'Realism' and 'Idealism,' Lotze is right in saying that it consists in the assumption that knowledge must be found in states of the individual subject. But one would have thought that Lotze, coming after Kant and Hegel, might have seen that this very assumption was the *fons et origo mali*; and that if we are to make a 'critical regress' to a more adequate conception of knowledge we must begin by challenging its validity. This, however, is not Lotze's

method. Instead of asking whether there is any justification for the assumption that knowledge consists in subjective states of consciousness, he endorses this common pre-supposition of 'Realism' and 'Idealism,' assuming that knowledge in its first form is nothing but a 'world of ideas within us.' If we are to attach any precise meaning to this doctrine, we must suppose that it is possible to have knowledge in the form of our own ideas, without having a knowledge of reality. How we can be entitled to call such 'ideas' *knowledge*, Lotze does not explain. If our ideas are not *of* reality, how can they be 'knowledge,'—unless we suppose that there are two kinds of 'knowledge,' one of 'ideas' and another of 'reality'? And if we do make this supposition, we have then to face the difficulty of explaining how we can have a knowledge of reality *without* 'ideas.'

That Lotze, in thus confining knowledge to 'our own ideas,' really endorses the false pre-supposition which underlies 'Realism' and 'Idealism,' is placed beyond doubt when we carefully examine his words. We might at first suppose him to be maintaining that 'Realism' and 'Idealism' overlook the truth that the external world only exists for the knowing subject, in the process by which he interprets the data of sensitive experience, and therefore that there is no 'external world' except for the knowing subject. But, if this were Lotze's meaning, he would not have separated, as he does, between the theory of knowledge and the theory of reality. Nor will his words admit of this interpretation. If Lotze had meant to say that a world 'external' to the mind is without meaning, he would not have contrasted the 'varied world of ideas within us, it matters not where they may have

come from' with a world, real or supposed, 'outside us.' No doubt he refuses to admit that we can begin with the assumption that it is an 'external world' which 'awakens in us ideas'; yet he does not deny, but on the contrary implies, that 'ideas within us' have 'come from' some source, or are the 'material given to us' from which our knowledge starts. His doctrine therefore is, that our 'ideas' are the direct object of knowledge; in other words, that the mind has to start from 'ideas' which give us knowledge, but only a knowledge of themselves. It is this assumption which we have to examine.

Lotze tells us that "all we know of the external world depends upon the ideas of it which are within us." This cannot mean merely that we can have no knowledge of the external world unless we have 'ideas' of it. No doubt, if we are to have a 'knowledge' of the external world, we must have 'ideas,' *i.e.* 'knowledge,' of it. And these 'ideas' must be 'within us' in the sense of being *our* knowledge. But if this were all that Lotze meant, his first sentence would read: "All we know of the external world which we know, depends upon the knowledge which we have of it." No one is likely to dispute so palpable a truism, nor is it what Lotze has in his mind. What he really means is, that our first knowledge is of 'ideas' in our own individual minds, and that so far we have no knowledge of anything but those 'ideas.' This is the truth, we are to understand, which every philosophical theory must admit. Now, so far from admitting that knowledge starts from 'ideas' in the individual mind, we make bold to maintain that there are no such 'ideas.' There are no separate 'ideas' interposed between the subject and the object, which form the bridge over which

the subject may, in some unexplained way, pass to the object, if there is any object. If the subject has a direct knowledge only of his own 'ideas,' by what mysterious process is he to liberate himself from the charmed circle within which he is confined? If, starting with 'ideas,' interposed between him and reality, he attempts to get out to reality, it must be by some interpretation of his 'ideas' as symbols of a reality not given in them. But this interpretation will itself consist in 'ideas,' unless we are to suppose that knowledge begins with 'ideas,' and then, by a sudden and abrupt transition, changes into a knowledge of reality without the interposition of 'ideas' of reality. We must, therefore, either hold that the subject first has 'ideas' which are not the knowledge of reality, and then has 'ideas' of the meaning of these 'ideas'; or we must hold that the subject begins with a knowledge of reality, not of 'ideas' interposed between him and reality. If we adopt the former view, we fall into the absurdity of supposing that, while 'ideas' are originally separate from reality, the 'ideas' of these 'ideas' are an actual comprehension of reality; if we adopt the latter view, we abandon the assumption that knowledge is of 'our own ideas,' and admit that it is knowledge of reality. Why, then, as Aristotle would say, should we not admit at once, what we have to admit in the end, that we begin with an actual knowledge of reality, and that 'ideas' are not something interposed between the subject and the object, but the subject's comprehension of the object? Knowledge must surely be of the real, or it is not knowledge. Lotze's way with 'Realism' and 'Idealism' is to admit the false assumption of both, and then to attempt to escape from the consequences of his

own admission. No true theory of knowledge can be constructed on such lines. Until it is seen that knowledge consists in the comprehension of the real, not in the manipulation of 'ideas' interposed between the subject and the object, we may continue to speak of 'knowledge,' but what we call 'knowledge' can only be what we are determined to regard as 'knowledge' in defiance of our own theory, which makes it impossible.

Having raised up an impassable wall between the subject and the real world, Lotze has to attempt the impossible feat of scaling it, and entering the real world which he believes to lie beyond. His first essay in this direction is to deny the common assumption that "human knowledge is intended to be a copy of a world of things," and that 'truth' is the "agreement of our ideas with the real condition of the things which they profess to copy." The fact is, that "nothing else but the connection of our ideas with each other can ever be made the object of our investigations." "To thought and its necessary laws we are, as a matter of fact, limited in every resort: the faith, which reason entertains, that truth, whatever it may be, is discoverable by thought, is the unavoidable postulate of all inquiry." "We may exalt the intelligence of more perfect beings above our own as high as we please; but so long as we desire to attach any rational meaning to it, it must always fall under some category of knowledge or direct perception or cognition, that is to say, it will never *be* the thing itself but only an aggregate of ideas *about* the thing."[1] "Knowledge under whatever form can never *be* things in themselves, but only represent them." We

[1] Lotze's *Logic*, Vol. II., p. 428.

must not, however, say that "we only know phenomena, and not the essence of things in themselves." Even should we only say, that "*if* things exist knowledge apprehends only their appearance, not their essence," the proposition "carries the idea of a thwarted purpose. . . . We may at once pronounce an opposite point of view to be conceivable, which should regard things as mere means to produce in us in all its details the spectacle of the ideal world."[1] There is, therefore, a certain "truth which belongs to the world of our ideas in itself, without regard to its agreement with an assumed reality of things outside its borders."[2]

Lotze refuses to admit that "human knowledge is intended to be a copy of a world of things." Now, if this meant that the whole conception of a 'world of things' existing apart from every mind is untenable, there would be nothing to object. The logical result of such a doctrine, as we have already seen in examining Locke, is the denial of all knowledge, either of nature or of the mathematical or moral relations. If our knowledge is a 'copy' of things which exist, and which have a certain definite nature independently of their relation to mind, it must consist in a passive reflection of things, and will therefore be real only by the absolute exclusion of all conceptual activity. The truth is that the 'world of things' exists nowhere but in the mind of a thinking subject, and that to speak of it as if it existed in itself, apart from every thinking subject, is to suppose that it existed before its origination. To the superficial objection, that on this view the world comes into being with the

[1] *Ibid.*, p. 431. [2] *Ibid.*, p. 434.

conceptual activity of each subject, it is sufficient to answer that the knowable world is not the arbitrary product of the individual subject. What Speculative Idealism maintains is that, while the 'world' is a 'cosmos of experience,' and therefore exists for each thinking subject only in experience, it is a 'cosmos' just because the thinking subject is capable of grasping the permanent or essential nature of reality. There is no object apart from a subject, and yet it is only as the subject is capable of grasping the universal or necessary constitution of reality that there is for him 'a world of things.' This implies that, while in each subject there is a process of intelligent activity, through which alone his experience of a world of things originates, he yet is able to comprehend the true nature of the world because there is in him the principle which is involved in the actual nature of reality. The supposition that a world assumed to lie beyond intelligent experience is identical with what it is within intelligent experience is manifestly absurd, since it implies that the whole process in which the 'cosmos of experience' is gradually formed through the exercise of intelligence is superfluous. To speak of knowledge as a 'copy' of a 'world of things' is meaningless; for knowledge cannot be a 'copy' of what exists only in knowledge. At the same time we must not lose sight of the truth imperfectly indicated by the conception of knowledge as a 'copy' of reality. What gives force to the doctrine is, that not every imperfect apprehension of reality is knowledge, but only that consistent and true insight into reality which results in the 'cosmos of experience.' Reality is intelligible, and except in so far as the subject comprehends its intelligibility he has no knowledge. His know-

ledge must conform to reality or be a 'copy' of it, in the sense that he must build up in his mind a world which is not an arbitrary product, but the product of that intelligent activity in the exercise of which he is identical with every possible intelligence. Now, this is not the view which underlies Lotze's objection to the doctrine that "human knowledge is intended to be a copy of a world of things." What he means is, that the 'world of things' has an independent nature which is not grasped by the human intelligence. The human intelligence goes on by a law of its own, instituting relations between its 'ideas,' but these relations cannot be predicated of things in themselves. Thus for Lotze there are two worlds—the 'world of things' and the 'ideal world,'—and what he contends is that we have no right to regard the one as a precise counterpart of the other. He denies, in other words, that our 'ideas are a 'copy' of the 'world of things,' not because the latter is a fiction of abstraction, but because it differs from the former. Lotze, in short, has not got rid of the ordinary dualism of the real and the ideal world, but he is so far aware of the difficulty it involves as to see that, if there is a real world with a law of its own, it is one of which we can predicate nothing definite. Certainly we can predicate nothing definite of it; not, however, because our intelligence proceeds by a law of its own, which is not the law of the world, but because a world which cannot be brought within intelligence is in the strictest sense unintelligible. For, how shall we give it a meaning to ourselves? Lotze talks of a 'world of things,' and thus assumes distinctions within the world which he does *not* know; but these distinctions are simply transferred by him from the known to the unknown world. Surely it is self-

evident that a world lying beyond our knowledge is for us nothing at all: it is at the best the hypostasis of 'pure being'; which, as Hegel has shown once for all, is unthinkable, and is only supposed to be thinkable because we unwittingly inform it with determinations stolen from the thinkable world that we do know. When Lotze adds that 'truth' is not "the agreement of our ideas with the real condition of the things which they profess to copy," he is expressing the same untenable opposition of the ideal and the real world. If 'things' lie beyond the sphere of our knowledge, we can of course know nothing of their 'real condition.' Lotze assumes that the only question is whether our 'ideas' are a true counterpart of things; whereas the real question which he ought to have faced is whether there are any 'things' at all, as distinguished from the 'things' that we know. The compromise he adopts is at bottom the same as that which ruined the philosophies of Descartes, Spinoza, and Leibnitz. Two parallel and independent worlds are set up, which are imagined to stand opposite each other without coming in contact; and the insoluble difficulty arises, how the one can ever pass over into the other. Of course there can be no communication between two closed spheres; and hence Lotze should in consistency deny that there is for us any 'world of things.' Unable, apparently, to see the result of his own principles, he continues to assume the independent reality of the 'world of things,' but denies that the 'world of ideas' is a true counterpart of it. Thus he misses the only tenable theory of knowledge—the theory that knowable and true reality are identical—and is forced to fall back upon a blind 'faith,' which is properly the 'faith' in the

mysterious and inscrutable character of what can only be defined as 'pure nothing.'

Lotze, however, does not recognize the real nature of his own doctrine; and hence he tells us, on the one hand, that "nothing else but the connexion of our ideas with each other can ever be made the object of our investigations," and, on the other hand, that "the faith which reason entertains that truth whatever it may be is discoverable by thought, is the unavoidable postulate of all inquiry." Now, if we are limited to our own 'ideas,' which do not enable us to discover the nature of reality, what is the value of this 'faith' which is the "unavoidable postulate of all inquiry"? It is certainly true that the ultimate principle which is pre-supposed in all knowledge is the intelligibility of the real; but no one has a right to appeal to this principle in support of a doctrine which virtually makes the real unintelligible. If 'truth' consists only in the coherence of our 'ideas,' and these 'ideas' do not reveal to us the real nature of things, our 'faith' that 'truth' is 'discoverable by thought' is proved to be false. We start with a 'faith' in our power to attain to 'truth,' and learn, according to Lotze, that the only 'truth' for us is the 'truth' of our own 'ideas.' Must we not, then, come to the conclusion that our 'faith' was based upon an unprovable assumption? The only way in which our 'faith' can be restored, if it is to have a rational basis and not to be the mere survival of a blind conviction, is to reconstruct our theory of knowledge. How this may be done has already been indicated. There is no 'world of things' as distinguished from the 'world of ideas,' but only a single real world which exists nowhere but in



intelligent experience. If this is true, the 'faith' of reason in itself is justified; if it is not true, there is for us no 'truth,' 'knowledge,' or 'reality.'

Lotze, however, objects that knowledge "will never *be* the thing itself, but only an aggregate of ideas *about* the thing," or, as he also puts it, "knowledge under whatever form can never *be* things in themselves, but only represent them." As this objection is supposed to be fatal to the possibility of any knowledge of reality as it is in itself, we must try to determine its value.

Let us begin by asking what is meant by the 'thing itself,' 'about' which we have knowledge, but which knowledge can never 'be.' This 'thing itself,' we are given to understand, does not enter into knowledge, but lies apart from knowledge, which only 'represents' it. What then, *is* this 'thing itself,' in itself or as it exists apart from our knowledge; and not merely apart from our knowledge, but from that of any intelligence however perfect? We do not know; for, though we 'represent' it, or think 'about' it, our 'representation' or 'thought' never brings the 'thing itself' within knowledge. But what is thus inscrutable has no meaning whatever for us or any other intelligence; it cannot be named, thought, imagined, or felt, and is in fact nothing. We may, therefore, admit that, on Lotze's theory, knowledge cannot 'be' this 'thing itself.' Knowledge is an ordered world, infinitely concrete and full of life and movement, not the pale and shadowy ghost which Lotze imagines to be the true reality. What gives plausibility to his contention is, (1) that he tacitly identifies the ordered world, which exists within our knowledge, with the fiction of the 'thing itself'; and (2) that he contrasts the world, as so conceived, with

the subject knowing it. We need not further insist upon the former of these confusions. Granting that we have no knowledge of an absolutely indeterminate world, out of all relation to us as knowing, it does not follow that we have no knowledge of the only real world, the world which is embraced within our intelligence. The second confusion rests upon a similar abstraction. The real world is now conceived as the world we know, but it is supposed to exist independently of the subject knowing it. Hence the subject in knowing it, as we must suppose, is only coming to the consciousness of an object, which is determined already apart from him. The subject, therefore, in all his consciousness opposes the object to himself, and only in this opposition has he any knowledge. If, therefore, it were possible for him to lose this consciousness of the opposition between himself and the object, he might then *be* the object, but he would no longer be a *knowing subject*. Lotze, in short, goes further even than Mr. Spencer. The latter denies that *we* can ever transcend the opposition of subject and object; the former adds that *no* intelligence, however perfect, can ever transcend it. It follows, according to Lotze, that knowledge can never *be* the 'thing itself.' Now, the whole of this reasoning rests upon the assumption that we can have a knowledge of reality only if the distinction of subject and object is transcended; and, as this distinction is one 'never to be transcended,' there can be no knowledge of reality. The simple answer is, that the distinction of subject and object cannot be transcended, because it is involved in the very nature of the real world. Lotze assumes that the object exists apart from the subject, and then he puzzles himself to find out how the one can pass over

into the other. There is of course no intelligible answer; for, if the subject is separate from the object, and the object from the subject, they never come in contact at all. But there is no object apart from the subject, and therefore no need that the one should either *be* or *become* the other. The real world is a unity in which the fundamental *distinction* is that of subject and object; but it is only a *distinction*, not a *separation*. Subject and object are *identical* in this sense, that the whole reality of the knowing subject consists in its relations to the object, and the whole reality of the object in its relations to the subject. We may, therefore, say that the subject *is* the object, if we are careful to add that what is meant is the total reality in its two distinguishable aspects of knower and known. One difficulty which is felt in accepting this view arises from the fact that the 'object' or 'world' is usually identified with the world of nature, which seems to be distinct from the subject as a knowing, feeling, and willing being. The restriction, however, is perfectly arbitrary; the 'object' or 'world' includes *all* phases of reality, and only in this wide sense can it be said that it is identical with, or rather correlative to, the subject. A kindred difficulty is, that the subject is apt to be identified with a certain phase of it. From this point of view it seems reasonable to say that knowledge can never 'be' the object. It is not, however, maintained by Speculative Idealism that the knowing, as distinguished from the feeling or willing subject, comprehends the object, but only that the whole concrete subject is identical with the whole concrete object. A third difficulty, that the individual subject cannot be identical with the universe as a whole, is based upon a mere misunderstanding. It is not con-

tended that the individual is the whole, but only that the whole is for the individual always the unity of subject and object, the one being essentially involved in and correlative to the other. Hence the development of the knowing subject is the development of the known object. Lotze, on the other hand, assumes that the former develops, while the latter remains at rest; failing to observe that the known world develops *pari passu* with the knowing subject.

Following out the fundamental antithesis of 'ideas' and 'things,' Lotze naturally speaks of the "truth which belongs to the world of our ideas in itself, without regard to its agreement with an assumed reality of things outside its borders."[1] He therefore tries to show that our 'ideas' have 'validity,' quite apart from their relation to the 'reality of things.' "Ideas," he tells us, "in so far as they are present in our minds, possess reality in the sense of an Event—they *occur* in us: for as utterances of an activity of presentation they are never a Being at rest, but a continual Becoming; their content on the other hand, so far as we regard it in abstraction from the mental activity which we direct to it, can no longer be said to occur, though neither again does it exist as things exist: we can only say that it possesses Validity."[2]

The distinction here drawn between an 'idea' as 'event' and as 'content' corresponds to Berkeley's distinction between particular ideas as they are 'in their own nature' and their symbolical or general meaning.[3] We have, therefore, to ask whether Lotze has avoided the defect which we have seen to beset the doctrine of Berkeley. Lotze

[1] *Ibid.*, p. 434. [2] *Ibid.*, p. 439. [3] See above, pp. 346-7.

tells us that 'ideas' are, on the one hand, 'events,' and, on the other hand, have a 'content,' which is neither an 'event' nor 'exists as things exist,' but merely possesses 'validity.' (1) In what sense can it be said that 'ideas' are 'events'? When we turn our attention to the process of mental life as it goes on in the conscious subject, it is of course obvious that the mind is never at two successive moments precisely the same. If, therefore, we fix our attention upon this process, it is natural to say that 'ideas' are a succession of 'events' or 'occurrences.' It must be observed, however, that an 'idea' is not an individual state which exists apart from the whole conscious life of the subject. But the conscious life is not possible apart from the conceptual activity by which the subject has constructed for himself an orderly world. The 'ideas' of the subject are not something interposed between this orderly world and the subject, but certain aspects of this world to which attention is directed. We cannot therefore speak of 'ideas' as 'events' which occur in separation either from the conscious subject or the objective world of which he is conscious; what we must say is that in the process of conscious life the subject, remaining identical with himself, successively directs attention to different aspects of the ordered world within which his whole mental life goes on. But, while this temporal aspect of the conscious life is real, it is, relatively to the complexity of the conscious life as a whole, a superficial and comparatively unimportant characteristic of it. The undue importance attached to the temporal aspect of conscious life has arisen from the sensationalist doctrine, that the mind is composed of a number of individual states occurring one after the other, and only externally 'associated.'

Lotze is still to a certain extent under the influence of this view, and therefore he figures the mind as a series of 'ideas' or states, instead of grasping it as the process in which a self-identical subject develops, as by his mental activity there arises for him an ordered or real world. (2) Lotze, however, sees that 'ideas' are significant or have a general meaning, and therefore he tells us that they have 'content.' It seems to me unfortunate that this distinction between ideas as 'events' and as having 'content' has been fixed upon by Mr. Bradley and others as the key to the intellectual processes. In the hands of Lotze at any rate the 'content' of an idea does not seem to differ from the 'abstract idea' of Locke. But the 'abstract idea' of Locke is a mere fiction; the only 'ideas' which are really significant are 'universals,' *i.e.* the comprehension of certain fixed relations of the real world, which are grasped by the thinking subject. These exist only for the thinking subject in so far as there is for him a 'cosmos of experience'; they are not 'events,' though they must be thought at some time, and their 'validity' consists entirely in their 'truth,' *i.e.* in the fact that they express the actual nature of the world. But this is not the sense in which Lotze speaks of the 'validity' of 'ideas.' An 'idea,' he tells us, has 'content' "so far as we regard it in abstraction from the mental activity which we direct to it." And no doubt an 'idea'—say, the idea of the causal connexion of two events—does not depend for its content upon the direction of attention to it; it is an actual determination of the real world, which is involved in the process by which that world is constituted as actual. Lotze, however, abstracting from the living process in which the world of our experience is constructed, views the 'idea'

as if it were, in Spinoza's phrase, a "dumb picture on a panel," overlooking its real character as a phase of the whole process of conceptual activity, which is at the same time the comprehension of the actual. The 'validity' of an 'idea,' *i.e.* of a conception, is therefore supposed by him to consist merely in the consistent connexion of 'ideas in themselves,' not in the comprehension of the real world. But, as there is no connexion of ideas which is not at the same time the comprehension of the actual, the opposition between the 'validity' of our ideas and the 'truth' of things is untenable. So far as our ideas are 'valid' they are 'true'; and if we attempt to distinguish between 'validity' and 'truth,' as Lotze virtually does, we fall into the abstract opposition of a connexion of ideas which is not a connexion of things, with the result that what is 'valid' is not 'true,' and what is 'true' is not 'valid.' What we maintain, then, is—(1) that 'ideas,' as something interposed between the knowing subject and the real object, have no existence whatever, but are merely a fiction due to a false theory of knowledge; (2) that, having no existence, 'ideas,' in Lotze's sense of the term, cannot be either 'events' or have a 'content'; (3) that there is no distinction between 'validity' and 'truth,' but that 'validity' or 'truth' is simply the comprehension of the universal relations involved in the knowable world.

XI. THE FEELING SOUL.[1]

It may be well to point out that, in maintaining the world of our 'experience' to be a world which exists only for a

[1] Supplementary to chap. viii., pp. 190-4.

thinking subject, it is not denied that there is a stage in the individual life prior to 'experience,' but only that in this stage there is no consciousness of a connected system of objects. It is, therefore, metaphysically unimportant whether feeling, as it exists for the merely feeling soul, is simple or complex; for, whichever view is taken, the subject has not yet distinguished objects for itself, and therefore for it there is no known world. The idealistic view, that only for a thinking or universalizing subject is there any 'cosmos of experience,' is not dependent upon the Kantian assumption that sense supplies a mere 'manifold'; on the contrary, it denies that, in our thinking experience, there is any mere 'manifold,' maintaining that, when the sensitive life has become an object of knowledge, it has been transformed by being determined as a knowable aspect of the one world which exists only in the medium of thought.[1] But, though the metaphysical interpretation of reality is independent of the special psychological view which is taken of the feeling soul, it is apt to be supposed that the former is discredited if the latter is shown to be inadequate. I shall, therefore, attempt to characterize the feeling stage.

The 'feeling soul' is another term for the feeling life, as distinguished from the life of beings which do not feel. Hence only animals have 'feeling soul.' Now it is part of the task of psychology to inquire into the first or simplest phase of the feeling life; in other words, to determine what is the state of the feeling being, as it exists prior to all more developed phases of life. Perhaps I cannot do better than quote its characterization by Mr. Bradley, which, with certain explanations, seems to me true.

[1] On this point see my *Christianity and Idealism*, chap. vi. Cf. Note ix., pp. 418-21.



"In the beginning," we are told, "there is nothing beyond what is presented, what is and is felt, or is rather felt simply. There is no memory or imagination, or hope or fear, or thought or will, and no perception of difference or likeness. There are in short no relations and no feelings, only feeling. It is all one blur with differences that work and that are felt, but are not discriminated."[1]

The difficulty in dealing with the earliest phase of psychical life is to exclude what belongs to later phases. There is a temptation to characterize the germ of the psychical life by attributes which do not belong to it, but which are drawn from a more developed stage. This temptation Mr. Bradley has tried to avoid, and on the whole successfully. There is, however, one term which he employs that is misleading. He identifies what is 'felt simply' with what is 'presented.' No doubt he limits the term 'presented' by explaining that it means 'felt simply'; but it is questionable whether it is advisable to use the same term 'presentation' to express mere feeling and the more developed stage of psychical life in which the distinction of subject and object has arisen, just as it is doubtful whether we can speak of thought as 'presentation.' I should be disposed to limit the term 'presentation' to the intermediate stage of perception, and to identify it with 'percept.' In any case 'presentation' as here used to express immediate feeling must not be confused with 'presentation' in the sense of a distinct object of perception.

At the stage, then, of the merely feeling soul there are only felt differences. The psychologist who makes these

[1] Mind, *O.S.* xii., 343.

an object of reflection, and who views them as the first stage of psychical life, regards them as felt differences, which imply the continuity of a single being. There are felt differences, and even changes of these within a limited range, but the feeling being is not itself aware of these changes or of its own continuity. On the other hand, if we admit that there is a feeling of difference, we cannot deny that there is a correlative feeling of unity or continuity. Neither, it is true, is discriminated from the other, but unless we reduce feeling to nothing at all, we must admit a feeling of unity no less than a feeling of difference. Of course a being of this kind, since it has not even reached the stage of discriminating one feeling from another, has no perception, much less ideation or intellection. Hence the feeling being is not aware of the present, since the present has no meaning except in relation to the past and the future. Nor has it any awareness of extension, which implies the discrimination of 'here' and 'there.' It need hardly be added that for the feeling being there is no 'body,' since 'body' implies awareness of feelings as discriminated and referred to an extended organism.

Mr. Bradley speaks of feeling as a form of 'experience.' This is apt to mislead, since the term 'experience' is usually employed to designate the contents of the being for whom the distinction of various objects, and of these from the subject, has arisen. The application of the term 'experience' to the merely feeling being is open to the same objection as the use of the term 'presentation': it tends to confuse the distinction of the earlier and the later phase of psychical life; and it is doubtful if Mr. Bradley has avoided the confusion.

It seems worth while noting that this stage of psychical

life is least fit to serve as the type of that perfect unity of idea and reality which is the goal of all knowledge. Nothing can be more misleading than to contrast the unity of feeling with the contradiction or antithesis of the thinking life. For the feeling life is *not* a unity: it is indeed at the furthest remove from unity. To be a unity a being must be able, while discriminating what presents itself to it, to connect what is discriminated within the unity of a single whole. But the feeling being neither discriminates nor unites: indeed discrimination and unification are inseparable from each other. The feeling life is merely the undifferentiated possibility of unity and difference, but actually it is neither the one nor the other; it is, in fact, only by anticipation that we can call it either a unity or a difference. Hence it is entirely fallacious to regard the feeling being as a unity. This view seems to rest upon a confusion between feeling and emotion. In the latter there is really unity, because the subject of emotion has passed through the discriminating stages of perception, imagination, and thought, and come back to itself. Hence emotion presupposes these stages. It is totally different with mere feeling—that form of feeling which is prior to these more developed stages—for in it there is no unity just because there is no distinction. We can only express the fact by saying that the feeling life is the vague awareness of unity and difference, but explicitly neither the one nor the other.

This feeling life, as Mr. Bradley tells us, "can not (for the soul) be discrete, because that implies distinction. . . . If the whole were not unbroken, it would at least so be given to a feeble mind. . . . For itself, it is not discrete, and hence also it is not explicitly continuous."

In this passage an undue emphasis seems to be laid upon the *continuity* of the feeling life, as distinguished from its *discreteness*. No doubt it is said that the feeling being is not 'for itself' 'explicitly continuous'; but, on the other hand, it is implied that 'for itself' the feeling being is given as 'an unbroken whole.' Now, we must observe that, at this stage, there is neither explicit continuity nor explicit discreteness, and hence that it is misleading to speak of it as a 'whole.' The question should not be put in the form: 'Is the feeling life discrete *or* continuous?' as if it must be either the one or the other. For there is another alternative, viz.: Is the feeling life *neither* discrete *nor* continuous? And the answer must be in the affirmative. The feeling life exists at a stage *below* both continuity and discreteness, and therefore is explicitly neither continuous nor discrete, yet implicitly both. It is natural to deny the discreteness, because the prevalent account of the primitive soul-life is, that it consists of discrete feelings; but, in avoiding this mistake, we must not fall into the opposite mistake of conceiving it as an 'unbroken whole' or continuity. Mr. Bradley is on the verge of contradiction when he says, "If the whole were not unbroken, it would at least so be given to a feeble mind." For (1) there can be no awareness of a 'whole' where there is no awareness of 'parts'; and, by hypothesis, there is (for the feeling being) no awareness of parts, which implies discrimination. And (2) there is no continuity (for the feeling being), for continuity implies change, and there is no awareness of change. Hence we cannot say that the 'whole' is 'given' (or 'presented') as 'unbroken.' There is, for the feeling being, merely undifferentiated feeling, which is neither discrete nor continuous, but the pos-



sibility of both. The psychologist, finding it to develop into both, may conceive it as the germ from which both develop, but it is a mistake to regard it as the anticipation of either. Perhaps we cannot better state the character of the purely feeling being than by saying that it is a felt unity-in-difference, understanding that neither the unity nor the difference is 'explicit.'

So far the feeling being has been characterized merely as an implicit unity-in-difference. But it may be asked whether there is pleasure or pain. "It is safer," says Mr. Bradley, "*not* to suppose that at first pleasure and pain may be absent from sensation, or (for the mind) are attached to parts of the whole." It is obvious that in a purely feeling being pleasure and pain cannot be 'attached to parts of the whole,' for the simple reason that there are no 'parts.' Nor it is very evident how there can be any 'presentation' of pleasure and pain. "If we take 'given' or 'presented' . . . for that which is simply, and comes as it is, then in this sense pain and pleasure must be called presentations." And no doubt this is true enough; but surely it is misleading to speak of pleasure and pain as 'presentations' in a being which simply feels. Pleasure and pain may be called 'presentations' at the stage of conscious life, where there is discrimination, but hardly prior to discrimination. At the stage of feeling there merely is a certain change in feeling, which is a felt difference and a felt pleasure or pain; but the felt difference and the felt pleasure or pain are one indissoluble state (for the feeling being). It must also be observed that Mr. Bradley, in denying that pleasure and pain "are attached to parts of the whole," seems to be guided by the idea that the feeling being is (for itself) a whole. What he is concerned to deny is that pleasure

and pain are attached to the 'parts.' And this is a natural emphasis, because he is tacitly combating the Associationist doctrine that the psychical life is made up of discrete parts. If that were true, pleasure and pain would be 'attached to the parts.' But, as we have seen, there are (for the feeling being) no discrete parts, and hence pleasure and pain cannot (for that being) be attached to the parts. On the other hand, as we have also seen, the feeling being is not a whole for itself, and therefore pleasure and pain cannot be attached to the whole. Where all is indefinite, pleasure and pain must be indefinite too; there will naturally be *some* difference between them and the felt differences, but without discrimination the difference will not be 'presented' as a difference. The pleasure and pain will neither be attached to the whole nor to the parts, but will be simply a vague aspect of the feeling of differences, which will afterwards be discriminated as perception of the pleasant and the painful. As to the remark that the 'given' or 'presented' must be taken, "not as implying a donation or even a relation to an Ego," it has its value. For (1) it rightly protests against the idea that the psychologist, in seeking to characterize the psychical life, can accept without question the doctrine that we can attribute to the feeling being a theory of a thing in itself, by which the 'given' or 'presented' is produced. The psychologist may hold that this hypothesis is required to account for the existence of feeling, and if he could prove his case (which he cannot), his view would have to be accepted by the metaphysician; but it is obvious that, if we are to state what the feeling being is *for itself*, we cannot be allowed to attribute to it any conception of a thing in itself or of causation. Nor (2) can we attribute the 'given'



to an Ego. For the feeling being there is no Ego. It may be held that were there no Ego there could be no feeling, feeling having no meaning except as the receptivity of a subject. If this could be proved (and I do not believe that it can), we should have to incorporate it in our metaphysical theory; but it is manifest that, at the stage of the feeling being, there is no Ego any more than there is a thing in itself; and nothing but confusion can result from attributing to the undeveloped being what is true only of the developed being. The psychologist has therefore no right to become metaphysical and to foist his *theory* into the feeling being, which, so far from being able to form a theory, cannot even discriminate one feeling from another. The most that we can admit is, that the feeling being contains within itself implicitly the reference to an Ego, since it has a feeling of unity as well as difference. But, as we have seen, this admission cannot give countenance to the view that there is for it an Ego, but merely implies that there is an undifferentiated unity-in-difference, which will develop into the distinction of Ego and non-Ego.

So far, with certain reservations, I find myself in harmony with Mr. Bradley's view of the earliest phase of psychical life; or at least I differ from him only in holding that the feeling being cannot be characterized as (for itself) an 'unbroken whole.' But I find it hard to follow Mr. Bradley in what he next says as to the nature of the feeling being. "Is there anything at the start beyond mere presentation, that is, feeling with the distinctions of quality, quantity, and 'tone,' which *we* abstract from one another, but which at first come within one blurred whole, which merely *is*? I feel convinced that there is nothing." Now, it seems to me

that Mr. Bradley has suddenly deserted the psychological point of view, or rather shows himself to be here the victim of the 'psychologist's fallacy.' I have already tried to show that we cannot describe the feeling being as a 'blurred whole,' unless we mean by this an indefinite or confused feeling of unity-in-difference. It must now be remarked that we cannot possibly describe the feeling being as containing "distinctions of quality, quantity, and 'tone,' which *we* abstract from one another." (1) No distinctions are made by the feeling being, and therefore for it there is neither quality, nor quantity, nor 'tone' (if by 'tone' is meant pleasure or pain which presupposes discriminated sensations). For the feeling being a quality can only be a felt difference, not a distinction of one difference from another; for, how can there possibly be a distinction of quality where there are no distinctions at all? Nor, for the same reason, can there be a distinction of quantity, *i.e.* of the degree of sensation. And there can be no 'tone' without discrimination of pleasure and pain as connected with a sensation which has quality and quantity. Admitting that in the feeling being there are felt differences which develop into these distinctions, we cannot predicate of that being what is not yet developed in it. If we could thus attribute to the feeling being what exists only for the perceptive being, we might with equal propriety endow it with a conception of the universe, such as in our developed consciousness we have. It would almost seem as if Mr. Bradley regarded the feeling being as already containing, preformed within itself, the whole articulated world which is present for the rational consciousness. Surely, it is not necessary to say that we cannot in Psychology accept a

view which in Biology has been discredited. Just as the protoplastic germ of the living being is not an ill-defined miniature of the developed being, so the feeling soul is not a 'blurred whole' containing all the distinctions which are present at a more developed stage. (2) Hence it is not correct to say that '*we* abstract from one another' the 'distinctions of quality, quantity, and tone.' We cannot 'abstract from one another' what is not there to be abstracted. If in the feeling soul there are no distinctions, how can we possibly find them there? The biologist does not find in the protoplastic germ the distinctions afterwards exhibited by the developed being: he describes the germ as it is, and, finding it develop, he describes its later phase, and he connects the earlier with the later by the idea of evolution. Similarly, the psychologist finds the feeling being to be felt differences, and he finds the perceptive being to involve perceived differences; therefore he rightly connects the one with the other, affirming that the latter has evolved from the former. But he has no right to talk of the feeling being as if it contained distinctions which exist only for the perceptive being; to do so is to make development unnecessary. The psychologist who finds in the feeling being distinctions of quality, quantity, and 'tone' simply puts them there. Abandoning the psychological point of view he assumes a developed consciousness like his own, and of course he has no difficulty in 'abstracting from one another' distinctions which for him already exist.

XII. THE PROBLEM OF HUMAN FREEDOM: KANT AND GREEN.[1]

THE problem of freedom is so important in ethics, and yet so difficult, that a somewhat fuller discussion of it than that contained in the text seems advisable. As preliminary to that discussion, it may be well to consider the contrast which Kant draws between the theoretical and the practical reason, especially as there is a class of thinkers who seem to find in the "primacy of practical reason" the solution of nearly all problems.

The Kantian distinction between theoretical and practical reason is based upon the opposition between the world of 'experience' and the idea of an 'intelligible' world, which, as beyond 'experience,' cannot be an object of 'knowledge,' though it is inseparable from the consciousness of the incompleteness of 'knowledge.' When Kant limits 'knowledge' to what falls within the limited sphere of 'experience,' he assumes that nothing can be 'known' which cannot be brought under the forms of space and time. No object in space and time, he contends, can be self-determined; its changes are due to the action upon it of what is external, and hence it is merely one of an infinite number of mutually dependent objects. The limits of 'knowledge' are, therefore, conceived by Kant to be co-terminous with that determination of the real world which is characteristic of the special sciences, all of which investigate the various

[1] Supplementary to chap. x., pp. 235-248.

modes of action and reaction which constitute the process of things. Were this the sum of the Critical Philosophy, the result of Kant's enquiry into the conditions of knowledge would, at the most, merely be to confirm the presupposition of the sciences that the knowable world is under the dominion of unchanging mechanical laws. But this is only for Kant the first step towards the solution of the more important problems as to the reality of freedom, morality, and God; and therefore, though he limits 'knowledge' in the way indicated, he contends that this very limitation of 'knowledge' enables us to see that there is room for a rational 'faith.' The important question is whether this contrast of 'knowledge' and 'faith' can be legitimately maintained.

Kant is very emphatic in maintaining that the desires fall within the realm of 'experience' or 'nature,' and must therefore be determined in the same way as other objects. "The will as a faculty of desire," he says, "is simply one of the many causes in the world of nature, viz. that cause which acts from conceptions."[1] Just as he regards the 'manifold of sense' as something given to the mind, which it first determines by the synthesis of imagination as a congeries of objects in space and time, and then brings under the categories of the understanding; so he conceives of the desires as temporal phenomena standing in a relation of reciprocal causality to the objects which excite them. It is thus impossible to find within the sphere of knowledge or 'experience' anything to justify us in maintaining that in our actions we are free. We have to remember, however, that the

[1] *Werke*, ed. Hartenstein, v. 178.

sphere of 'experience' is for Kant a limited region, beyond which lies a whole possible world of reality, though we are unable in the theoretical use of reason to enter into and take possession of it. If, indeed, the world of 'experience' were self-complete, we should have no reason even to suspect the existence of realities which do not fall within its sphere; but, so far is this from being the case, that 'experience' can never be a complete whole, and therefore it points beyond itself. Now, this 'intelligible' world, which for the theoretical reason is merely problematic, is according to Kant a necessary inference from the consciousness of moral law. That we actually have this consciousness does not admit of doubt; and we are entitled to reason back from it to what it implies. For in the conception of ourselves as under obligation to obey an absolute moral law, it is implied that the self-conscious subject cannot in his real nature be merely a link in the chain of causes which determine the changes of phenomena. A being who is conscious of an 'intelligible' order, which stands in absolute contrast to the 'empirical' order, cannot be merely one object among others, or merely the subject for which all objects are, but must have within himself the faculty of originating the idea of a world which transcends the world of 'experience.' Kant maintains, however, that, though freedom is a necessary inference from the fact that we have the idea of a moral world, it is impossible for us to bring the free self within the sphere of 'knowledge.' And, obviously, if the highest point which we can reach in 'experience' is the determination of objects as dependent in all their changes upon the action of something external to them,

there can be no 'experience' of ourselves as self-determined. It is, in fact, from Kant's point of view of supreme importance to deny 'knowledge' of the self as free, because in no other way can he consistently preserve freedom at all. Since, then, we have no positive knowledge of the noumenal or free self, the idea of freedom presents itself to us in the first instance in a negative form, as independence of natural necessity. Nature, as known to us, is indeed a connected system, but it is only a system of phenomena. No phenomenal object has any independent reality, but exists and undergoes changes only because of its direct or indirect relations to other phenomena. We therefore seek in vain in the world of nature for an unconditioned object —an object which is either self-originating or self-determined. But the moral consciousness is possible only on the supposition that the beings possessing it are self-determined, and as self-determined they cannot be phenomena, *i.e.* objects which are determined in their action by other objects. A moral being cannot be determined by anything but himself; for, if he were, his actions would not be his own, but would be determined from without; and hence we could not in any proper sense speak of his *will*, any more than we can speak of the 'will' of a stone or of a 'mere animal.' A moral being must therefore be beyond the sway of external necessity; which is the same as saying that he cannot be an object of knowledge or 'experience.' Thus there arises an apparent contradiction between the necessary conditions of knowledge and the fact of the moral consciousness; for, while knowledge is bounded by the consciousness of phenomenal or dependent beings,

morality imperatively demands noumenal or free beings. The antinomy is of paramount interest to us as men; for, while we *know* ourselves only as phenomenal or dependent beings, we must *think* ourselves as self-dependent or free.

It is obvious that the whole opposition of theoretical and practical reason has its root in the doctrine that nothing can be 'known' except that which can be determined by the conception of reciprocal action. The self, so far as it is an object of 'experience,' must therefore be determined in the same way as other objects; and hence, so far as knowledge goes, it can never be shown to be self-determined. Now, Kant conceives the desires as determinations of the phenomenal self, and therefore he consistently holds that the desiring self can never be shown to be free But, when the desires are eliminated, the conception of self becomes empty, and it is therefore not surprising that it should be declared to be unknowable, though it is still assumed to be real. To get rid of the false antithesis of theoretical and practical reason we must therefore refuse to admit that knowledge is confined within the arbitrary limits assigned to it by Kant. Unless it can be shown that a free self is an object of knowledge, it must be discarded as a fiction. To fall back upon 'faith' is merely to admit a fundamental discrepancy in our theory.

One source of Kant's perplexities is his failure to recognize that there is no 'manifold of sense' within the ordered system of experience. Knowledge consists in the determination of the real world by the intelligence, and whatever comes within the system of experience takes its place there as an element in a whole. No



doubt experience is a process, but it is a process which implies the unity of the intelligent subject all through, and what does not come within this unity has for that subject no meaning. Now, this applies to the consciousness of the natural desires as well as to the consciousness of sensation. Just as sensation is no longer mere sensation when it becomes an object, so immediate desire or impulse is no longer mere desire when it exists as an object for the self-conscious subject. As such an object it has no existence except as an end conceived by the subject as fitted to satisfy him. A desired object is not an external thing, having a nature apart from what it is for the subject desiring it: its whole nature *as an object of desire* consists in the conception of it formed by the subject. Of course there are animal impulses which are not conceived ends, but these are nothing for the willing subject. No object is regarded as desirable unless it is conceived as that in the attainment of which the subject expects to find himself realized. That which is not conceived as a 'good' is not an object of desire, and therefore cannot be willed. I cannot have a desire without having the conception of my actual incompleteness and the correlative conception of myself as capable of being realized by becoming what in idea I am. When I conceive of an object as desirable, I have already interpreted my want as indicating an object necessary to the completeness of myself, *i.e.* as a desirable *end* at which I may aim. Without the capacity of forming some ideal of the ends which will satisfy me, I cannot have desire; and, therefore, to desire is to be already beyond immediate impulse. But he who is beyond impulse is capable of free action, in so far as freedom

consists in self-determination, not in determination from without. If it were true that there could be no self-determination without liberation from all conceived ends, it would follow that self-determination is an absurdity; but we need not hesitate to surrender this preposterous conception of freedom, when we see that it is equally incompatible with the existence of a self, since a self which is not conceived as realizable in definite ends must be absolutely empty, and indeed is nothing at all. The only real self is one which can find satisfaction in determinate ends. Now, no subject can have the conception of any end whatever if he is the passive recipient of external influences: his conception of himself as a self means that his natural impulses have been transformed into elements in his conception of himself.

Kant sees quite clearly that there can be no freedom if the subject is simply the recipient of natural impulses, which arise in him under the influence of external things; but he cannot get rid of the prepossession that there are actions which proceed purely from such impulses. Now, this is not an adequate account even of the impulses of an animal. An animal's actions are not the mere product of the interaction of the organism and the environment: they are the modes in which the unity of its life is preserved. The impulses have an end, and the whole process of the animal's life is the striving after the realization of that end. We may admit, however, that the animal has no definite consciousness of self, and therefore its impulses do not become for it definite conceptions of the totality of ends in which the unity of the self may be realized. Man has such a conception of himself, and therefore his natural impulses are transformed



into conceived ends. Hence no object as such can produce in him impulses which result in action, *i.e.* in willed ends. For, in the first place, there is no human object at all prior to the exercise of his activity in knowing; and, secondly, no object is converted into a desired end except through the conception of himself as capable of finding satisfaction in a particular way. Objects conceived as ends become elements in the total conception of himself: and apart from his conception of himself they do not exist at all. To say that an object acts upon or produces in him a desire, is to say that what is not a conceived end produces the conception of an end. Without self-activity there is therefore no end. To speak of my desire as if it could exist without my self-activity is indefensible. When, therefore, Kant speaks of desire as produced by an object, he is confusing desire with impulse, and a desirable object with an external thing. As desire and the object desired are inseparable, and have no existence apart from the self-active subject, they are simply two aspects of the self-active subject. In desire the subject conceives of himself as a determinate self to be realized. But, as desire exists only for the subject, so it can be realized only by the subject; and hence the transition from desire to will is the process in which the conceived self is realized. There is no way of realizing the conception of self except by making the desire real; and, if we eliminate the desire, there is nothing to realize. The moral life, therefore, cannot consist in the realization of self apart from desire, but only in such a realization of the self as will bring self-harmony; and this, as we may here assume, must consist in the harmony of the individual and the universal self. We may, therefore,

speak of freedom in two senses: it means either (1) self-determination whether good or bad, (2) self-determination which is harmonious with the true nature of the self. The former is the *sine qua non* of freedom, and without it the latter is impossible. Just as error is possible only for a thinking subject, so moral evil is possible only for a willing subject. An action must be *mine* before it can be good or bad, and what is not *mine* has no moral quality. Freedom, in the latter sense, is the conformity of my action with what I truly or in idea am. Hence I may be free in the former sense and not in the latter. Now, it is this second sense of freedom which Kant mainly has in his mind when he maintains that freedom consists in "willing the moral law." The moral law is the ideal of what I 'ought' to be if I realize what is implied in the true conception of myself. This conception of self, as Kant rightly maintains, is the product of reason; but he adds that it is exclusive of desire, and this, as we have argued, is to make the self an abstraction. Hence moral freedom cannot consist in realizing an abstract self, but only in realizing that self which is desired because it is adequate to the true nature of the self. The process of moral life is therefore a continual transformation of the lower into the higher self; but it presupposes the free activity of the subject as its necessary condition. Moral slavery is none the less free action.

If the view here advocated is adopted, we can no longer say that the free subject is not an object of knowledge; for, while it cannot be characterized as one object among others, it is known as what it is, viz., as a self-determined subject. Even Green, who has done so much to establish a true theory of knowledge and of



morality, seems to be partly under the influence of Kant when he draws a sharp contrast between knowledge and action. Thus he tells us that, "whereas in perceptive experience the sensible object carries its reality with it . . . in practice the wanted object is one to which real existence has yet to be given"; and he adds, that "the world of experience is independent of us . . . in the sense that it does not depend on any exercise of our powers whether the sensible objects, of which we are conscious, shall become real or no; they are already real."[1] Now, the contrast here drawn between 'perceptive experience' and 'practice' is misleading. In what sense can it be said that "the world of experience is independent of us," and "does not depend on any exercise of our powers"? The 'world of experience,' as Green well knew, is not a reality independent of the thinking subject; it exists nowhere but in and for the thinking subject, and it therefore comes into existence *as* a 'world of experience' only in the process by which the self-active subject constitutes it for himself as a 'world.' Nor can we say that "in perceptive experience the sensible object carries its reality with it," unless by 'perceptive experience' we mean the whole system of objects as constituted by the thinking activity of the subject. The 'reality' of the 'sensible object' is its 'reality' as a phase in the total process of the world. Such 'reality' is not determined by the mere conviction of the percipient subject that it is real; for, though this conviction may admit of justification, that justification can only consist in the consciousness of the systematic

[1] Green's *Prolegomena to Ethics*, p. 92.

unity of the whole. Since, therefore, the 'world of experience' exists only for the self-conscious subject, it cannot be opposed to the world of 'practice,' as that which is 'already real' to that which has to be brought into being. The 'world of experience' arises in the knowledge of the thinking subject, and particular phases of it, as arising in the perception of that subject, have no existence except in his perception. In other words, perception is itself an aspect of the self-active life of the subject; and it is only because we are accustomed to regard the object as if it already existed apart from perception, that we are apt to speak of it as already existing. It seems to me all-important to bear continually in mind, what Green elsewhere tells us, that there is no knowledge apart from will. Granting this, perception can only be one aspect of the total activity of the self-determining subject. The 'world of experience' is, indeed, a world of permanent relations, and in this its reality consists; but it is not a 'world' at all, except for a self-determining subject. It is true that the subject does not 'create' the world, if this means that the world is an arbitrary product; but what this implies is, that the whole process of the self-conscious subject is the comprehension of the real as a 'world of experience' or a fixed system. It is none the less true that, apart from the self-activity of the knowing subject, there is no 'world of experience'; and therefore we cannot contrast desire and perception as dealing respectively with what 'is to be' real and what 'is' real. The distinction lies in another direction. When desire is regarded as dealing with what 'is to be,' we are viewing the subject as in process; when perception is regarded as dealing with



what 'is,' we are viewing the process as complete. But perception as a process is equally of what 'is to be.' We naturally view it as the consciousness of *external* objects, which we conceive as already existing; but, if we are to give an adequate account of perception, we must not fall back upon the common-sense opposition of perception and its object; we must take the whole fact, and the whole fact is the perception by the self-active subject of an object which exists only for that subject. The process of perception, like the process of desire, is, therefore, from what 'is not' to what 'is.' The self-determining subject therefore falls within knowledge, whether as perceptive or as desiring. If we are to separate the object of perception from the perceiving subject, we must also separate the object of desire from the desiring subject. It thus seems to me that, in dealing with either perception or desire, we must not forget that both are phases of the one self-determining subject. Hence we cannot oppose knowing and willing, as if the former dealt only with the system of external objects, the latter only with the self-determining subject; what we must keep before our minds is the one self-determining subject, in its correlative aspects of object and subject. When we direct attention to the former, we view the subject as knowing; when we direct attention to the latter, we view the subject as willing; but the subject can neither know nor will anything that is not included within the one self-conscious life.

Let us return to Kant. According to him the Idea of the self as an absolute unity is merely 'regulative.'[1]

[1] Cf. Note IX., pp. 413-14.

When we conceive of the thinking subject as substantial, simple, self-identical, and self-dependent, we are viewing it as if it were an object of 'experience.' When this method of thought is applied to the desires, we are falsely led to suppose that these, like the affections of sense, are determinations of a single self-determining substance. But as such a substance is not an object of 'experience,' we are here taking the pure Idea of an unconditioned being for an actual knowledge of it. Now, it is of course true that, if the desires are separated from the self-conscious subject, the latter can only be the Idea of a unity which can never be known. But the reason why it cannot be known is that it is an unreal abstraction. The conception of a pure subject, which excludes from itself all desire, is the conception of a unity which is the unity of nothing. There can be no unity without differences, and if all differences are eliminated, what remains is not the Idea of a unity, but the Idea of a bare possibility, which is the possibility of nothing. In order to conceive of the self as a unity we must regard it as differentiating itself, and, so far as knowledge is concerned, there is for Kant no differentiation. We must therefore refuse to seek for the unity of the self in separation from the desires. The desires are the specific way in which the self-determining subject realizes its unity. Having various desires, *i.e.* various forms of self-determination, the subject is a real or individual self. If we ask whether this self is a 'substance,' we must answer that it is not a 'substance' in the sense of that which is characterized as an object determined by external relations to other objects; for, as so conceived, it is not a self, but merely a sum of relations. The self is a self only as it is not only permanent but

conscious of its own permanence. We may, if we please, say that the self is a self-conscious 'substance'; but this mode of expression, though it may suggest the true view, is, taken strictly, a combination of contradictory ideas. If a 'substance' is, in Kant's sense, merely the conception of the permanent in change, the thinking 'substance' will not be self-conscious; in other words, the conception of the real as determined by the category of 'substance' is only a relative point of view. When, therefore, we add that this thinking 'substance' is self-conscious, we have virtually transcended the conception of 'substance' altogether, and transformed it into the conception of a self-conscious subject. What survives in the new conception of the subject is its permanence; but 'permanence' now means self-conscious identity. It may be said that this self-conscious identity merely expresses the fact that there is one world of 'experience' only in so far as there is one self-consciousness, not that there is self-conscious identity apart from that world. To this we answer that, on Kant's own showing, the world of 'experience' is possible only under presupposition of the unity of self-consciousness; and therefore we are entitled to say that there never can be a self-conscious subject which fails to combine objects in a unity: what cannot be combined with the consciousness of self cannot enter into the world of 'experience,' and therefore is for the subject nothing, or at least nothing but that which is the mere possibility of being combined with self-consciousness. If, therefore, we separate the subject from its desires, there is no longer a unity, because there is nothing which is unified. But, if the desires are determinations of the self-conscious subject, that subject will be a unity in so far as it combines all its desires in

When we conceive of the thinking subject as substantial, simple, self-identical, and self-dependent, we are viewing it as if it were an object of 'experience.' When this method of thought is applied to the desires, we are falsely led to suppose that these, like the affections of sense, are determinations of a single self-determining substance. But as such a substance is not an object of 'experience,' we are here taking the pure Idea of an unconditioned being for an actual knowledge of it. Now, it is of course true that, if the desires are separated from the self-conscious subject, the latter can only be the Idea of a unity which can never be known. But the reason why it cannot be known is that it is an unreal abstraction. The conception of a pure subject, which excludes from itself all desire, is the conception of a unity which is the unity of nothing. There can be no unity without differences, and if all differences are eliminated, what remains is not the Idea of a unity, but the Idea of a bare possibility, which is the possibility of nothing. In order to conceive of the self as a unity we must regard it as differentiating itself, and, so far as knowledge is concerned, there is for Kant no differentiation. We must therefore refuse to seek for the unity of the self in separation from the desires. The desires are the specific way in which the self-determining subject realizes its unity. Having various desires, *i.e.* various forms of self-determination, the subject is a real or individual self. If we ask whether this self is a 'substance,' we must answer that it is not a 'substance' in the sense of that which is characterized as an object determined by external relations to other objects; for, as so conceived, it is not a self, but merely a sum of relations. The self is a self only as it is not only permanent but

conscious of its own permanence. We may, if we please, say that the self is a self-conscious 'substance'; but this mode of expression, though it may suggest the true view, is, taken strictly, a combination of contradictory ideas. If a 'substance' is, in Kant's sense, merely the conception of the permanent in change, the thinking 'substance' will not be self-conscious; in other words, the conception of the real as determined by the category of 'substance' is only a relative point of view. When, therefore, we add that this thinking 'substance' is self-conscious, we have virtually transcended the conception of 'substance' altogether, and transformed it into the conception of a self-conscious subject. What survives in the new conception of the subject is its permanence; but 'permanence' now means self-conscious identity. It may be said that this self-conscious identity merely expresses the fact that there is one world of 'experience' only in so far as there is one self-consciousness, not that there is self-conscious identity apart from that world. To this we answer that, on Kant's own showing, the world of 'experience' is possible only under presupposition of the unity of self-consciousness; and therefore we are entitled to say that there never can be a self-conscious subject which fails to combine objects in a unity: what cannot be combined with the consciousness of self cannot enter into the world of 'experience,' and therefore is for the subject nothing, or at least nothing but that which is the mere possibility of being combined with self-consciousness. If, therefore, we separate the subject from its desires, there is no longer a unity, because there is nothing which is unified. But, if the desires are determinations of the self-conscious subject, that subject will be a unity in so far as it combines all its desires in

one self-consciousness. Nor can there otherwise be any unity; for, if the desires are merely affections which arise in relation to external objects, they can never be *known* as elements in the one world of 'experience.' Grant that the desires are known as desires, and the unity of the subject is no longer a bare Idea, but is the necessary presupposition of the consciousness of desires as the desires of a single self-conscious subject.

When Kant affirms that the consciousness of self gives rise to the Idea of a pure intelligence, in which subject and object should be identical, he is virtually admitting that there can be no subject which has reality apart from the world which it constitutes by its self-activity. A subject which originates an ideal of a complete subject-object must be self-determining. Kant, however, regards this as merely an ideal, because the complete unity of subject and object is incapable of being realized. No doubt it is incapable of being realized by the human subject, but not for the reason assigned by Kant. He argues that, knowledge being only of a world of objects in reciprocal relation, the subject can only be known as such an object, and therefore the subject as originating the object is never an object of knowledge. But, as we have maintained, the world of experience cannot exist except for a self-determining subject, and therefore there is no absolute barrier to the extension of knowledge beyond the circle of 'phenomena,' provided that the actual nature of the world demands it. Now, when we realize that the world of experience can exist only for a self-determining subject, we are entitled to say that we must at the same time extend our conception of knowledge. Kant arbitrarily excludes from knowledge all those higher conceptions of



reality which are not included in the scientific stage of knowledge. But the scientific stage of knowledge is not ultimate: the whole self-conscious life escapes from a mode of conception which regards the world merely as a system of mutually related elements. The world is such a system, but to rest in this conception as final is to treat the whole range of human interests as non-existent, because they cannot be expressed in mechanical terms. When, therefore, under Kant's guidance, we see that the self-conscious life is inexplicable in such terms, we must be prepared to enlarge our conception of reality by removing the limit which we had before assigned to knowledge. If the unity of the world, which is tacitly assumed even in our scientific view of it, is relative to the unity of self-consciousness, we must be prepared to conceive of the real under the illumination thus cast upon it. We have, therefore, to ask how the self-conscious life is to be conceived, if we are to frame a theory which will do justice to it. We have seen that Kant's way of conceiving the desires as simply affections of the living being, and as excited by external things, makes the unity of the self-conscious subject inexplicable; and we must therefore ask how these desires must be regarded when they are brought into relation with the self-conscious subject.

Now, we have maintained that there is no 'matter of sense' such as Kant assumes to be given to the subject; that, on the contrary, sensation when it enters into the conscious life of the subject becomes perception, or the consciousness of certain aspects of the real world; and we have further maintained that perception, when it is developed, becomes the 'experience' of a connected system of objects. A similar view has to be applied to

the affections of the living being, so far as these are wants. What is maintained is, that when these wants become objects of the conscious subject they cease to be mere wants or appetites and become desires, *i.e.* the consciousness of ends which the subject conceives as essential to his own completeness. And when the deeper meaning of the desires is realized, these conceived ends are seen to form a system within which the subject seeks to realize his ideals of a complete life. Just as the perceptive world becomes the system of experience, so the various desires, which at first appear as separate ends, become a totality of ends in the world of human interests.

There are certain wants which are connected with the life of animals, such as hunger, thirst, sleep, exercise, and repose. These wants, cravings, or appetites involve a certain feeling of pain, arising from the absence of what is essential to the process of animal life. Such wants therefore involve an impulse or tendency towards their own satisfaction. They presuppose the unity of the animal organism, but they operate prior to consciousness on the part of the being having them. The want is the feeling of incompleteness, and as such it is accompanied by the tendency to negate itself. We can distinguish the want from the impulse to satisfy it, but these are inseparable aspects in the total state of the animal. Now, such wants do not enter into the conscious life of the subject, so long as they remain wants; nor, when they do enter into the conscious life are they any longer 'wants,' *i.e.* feelings or immediate impulses. To be conscious that we are the subject of a want, is to make the want an object, and therefore to contrast



it, at least implicitly, with the subject for which it is an object. When the subject becomes aware that he has the feeling of want he must distinguish it from other feelings of want, and this discrimination of various wants is not possible unless he presents one want as distinct from another. In the first instance the discrimination is vague and indefinite, but it gradually becomes more definite and precise with the general development of consciousness. The want when thus made an object is not a simple feeling, but the conception of a tendency towards a certain form of satisfaction. Hence the conscious subject, in making the want an object, at the same time becomes conscious of the class of objects which are fitted to satisfy it. Thus, in the consciousness of the want there is implied (1) the particular tendency, (2) the object or end to which it is directed, (3) the subject which is to be satisfied. The conscious subject thus conceives of himself as having various wants relative to various objects, the satisfaction of which is necessary to the completeness of himself. For him, therefore, the various wants are no longer simple feelings; they are 'ends,' the realization of which he conceives as bound up with the realization of himself; in other words, wants are for him *desires*, *i.e.* the conception of ends to be realized in order to the completeness of himself. The conscious life is therefore a process in which the subject comes to have a knowledge of himself as standing in relation to other objects than himself. As he gains experience of his own tendencies and of the objects which are the condition of their satisfaction, the world of his experience assumes a more or less systematic form. When he learns what objects will

satisfy his desires, he at the same time experiences a feeling of pleasure in their actual satisfaction. He also learns that certain objects are more fitted than others to satisfy a given want; and thus, having attained to the conception of himself as a subject capable of various actions, there is now mingled with his consciousness of the various desires and their corresponding objects the conception of certain objects as not only fitted to satisfy a given desire, but as fitted to satisfy it in a predominant degree. Seeking for the complete satisfaction of himself, he may therefore select those objects which bring a peculiar satisfaction. Further, with the development of the knowledge of objects fitted to satisfy his desires, there comes the knowledge that the realization of his desires is the means to the furtherance of life, and this again may be combined with the experience of the peculiar pleasure which accompanies the satisfaction of certain desires. Thus arises a possible discord in the conception of himself as the subject of desire. The satisfaction of desire may be connected not merely with the furtherance of life, but with the peculiar pleasure incidental to certain modes of satisfaction. These, as he learns, are not necessarily coincident, and hence the satisfaction of the one may be incompatible with the satisfaction of the other. The development of the desire for the pleasure incidental to the satisfaction of desire by means of certain objects may give rise to abnormal appetite. This perversion of desire is possible only to a self-conscious subject, since it presupposes the conception of self as a permanent subject. The so-called pleasure-seeker is therefore seeking, not pleasure, but the satisfaction of himself.



The absolute distinction, then, between theoretical and practical reason is untenable, and as a consequence the limitation of knowledge to the consciousness of external objects. That the self-conscious subject is an object for himself, and is therefore known, may become clearer if we ask why we distinguish between thought and will.

The distinction must not be conceived in this way, that thinking is consciousness of the object, while willing is the activity of the subject. No doubt it is true that thinking consists in the consciousness of that which is *objective*, *i.e.* in the comprehension of the essential nature or the universal relations involved in the object. But the object need not be a sensible thing, nor even the laws or universal relations of sensible things: it may be the subject viewed as an object. In this latter case, thought comprehends the specific nature of the subject as having certain tendencies, and as a being who strives to realize these or to complete himself. Thus thought includes the conception of the self as the unity in which these various tendencies are expressed. The object thought thus includes the thought of the subject. But the various desires or tendencies are in continual process of realization, and this process is will. There is therefore not only the thought of the desires, but the thought of the realization of those desires in acts of will. It is thus evident that the object of thought includes the thought of the realized subject—the subject as willing. Nevertheless, the thought of the subject as willing is not will, any more than the thought of the subject as feeling is feeling. But though this is true, it is also true that there can be no will or feeling which does not involve thought. This follows from the whole character of the

self-conscious life. There is no object for the subject except in so far as the subject has, with more or less completeness, grasped the object, *i.e.* grasped the universal nature of it; and therefore the whole objective world exists only for the subject who thinks it. Hence, when the subject is conscious of himself, he thinks himself or makes himself an object, and thus he exists as an object only for himself as thinking. The total object is therefore subject-object. Self-consciousness just consists in the subject thinking himself. But in this thought of himself is included the whole content of his conscious life; and therefore to think himself is to think implicitly all that has entered into his experience. There is thus no phase of the real which exists beyond thought; the real exists only in the medium of thought. If this is so, will does not lie beyond thought but is contained in it; for will is the realized or determinate subject, which exists as an object only for the subject as thinking.

Let us now look at will. The subject, as we have seen, thinks himself or makes himself an object. But he cannot be an object for himself except in so far as he determines himself. There is no subject without self-determination, for the subject cannot be an object for himself unless through the consciousness of a real world which originates for him by the activity of his thought. Thus the thought of a real world, including himself, presupposes that this world has arisen for him through his own activity in thinking. But this self-activity is will. Thus thinking presupposes will: only a self-active being can think, and a self-active being is one that wills. When, therefore, we speak of will, we emphasize the activity of the subject: when we speak of thought, we emphasize the product



of this activity; but as there is no self-activity except that which expresses itself in the product, and no product except that which is the expression of self-activity, will and thought are inseparable aspects of the one self-conscious subject. In will the emphasis is laid upon the subject, in thought upon the object; but since subject and object are identical, will and thought are identical, *i.e.* they are distinguishable aspects of the one self-conscious being.

If this is at all a correct account of thought and will, it is obvious that the whole self-conscious life is self-determining or free. But it is also obvious that, while it is the expression of self-activity, it is never the complete realization of freedom. There can be no thought, will, or desire without self-determination; but, since the thought of the self and the willing of the self are never the complete comprehension or willing of the self, the contrast between the incomplete and the complete self must remain, and therefore desire must remain. At the same time this incompleteness is transcended in principle just so far as there is a true conception of that wherein completeness consists; and this true conception constitutes the ideal of the moral life.

In what has been said the object has been to insist upon self-determination as the necessary condition of all action which can be attributed to the subject as his own. Whether an act is really a step in the process of true self-realization or not, it is always a form of self-activity. What is not due to the subject's self-activity is not his act, and has no moral quality, good or bad.

Now, if will is the process of self-determination, each phase in this process is a phase of self-determination.

But each such phase is a 'motive'; for a 'motive' is not the conception of the self as capable of being realized by the attainment of a certain end, but the actual process of realizing that end; and as this process is willing or self-determination, the 'motive' is nothing but the actual willing of a given end. To talk of a 'motive' acting upon the 'will,' is to set up the abstraction of 'will' as if it were something separate from the self-determining subject, and then to ask how the self-determining subject can be determined by something other than itself. A 'motive' is nothing but a step in the process of self-determination; it has no existence anywhere but for the self-determining subject. There is no object or end except for the thinking subject, and what has become for that subject an object, related to himself as an end and conceived to be essential to his own completeness, cannot act upon him, having no existence except for him as thinking and willing it. What gives countenance to the idea that an object acts upon the subject is (1) the false assumption that there can be any object apart from the activity of the knowing subject, and (2) the confusion between an 'object' in the sense of an external thing and an 'object' in the sense of an 'end.' As to the latter point, surely it is obvious that an external thing is no 'object' in the sense of an 'end' which can be willed. Knowledge, *e.g.*, is an 'end,' but it has no existence except as it is conceived either as desirable for the subject or as willed by him. Nor is it different with 'ends' that seem to be external objects. Food, *e.g.*, is an 'end' which may be desired and willed, but it is not an 'end,' so far as it is an external thing, *i.e.* so far as it is conceived as one object among others in the external



or spatial world. It is only 'food' in so far as the subject conceives of it as a means of satisfying his desires, *i.e.* completing himself. What is willed is not 'food,' but the satisfaction of the subject by the eating of the food. The food exists only as thought by the subject, and it is made an 'end' only as the subject seeks to complete himself by means of it. The subject wills nothing but himself as so conceived. Thus his 'motive' is the conception of himself as realized in that form of thinking which we call 'will,' and therefore the 'motive' does not exist except in the volition. How, then, can the 'motive,' *i.e.* the volition, act upon the will? To say so is to say that the volition acts upon itself.

From what has been said it is obvious that there is no freedom without motives. The 'motive' being the mode in which the self-determining subject seeks to realize himself, freedom without motives would be freedom apart from a self-determining subject; in other words, it would be blind necessity. Only if there could be self-determination in general which was not a definite form of self-determination could there be will without a motive. To speak of will without motives is to substitute the bare possibility of will for actual will, and a possibility which is never realized is not even possible.

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